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New Tools for Terrain Analysis
Three-Dimensional Computer Maps and Graphics

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United States Army Intelligence Center and School



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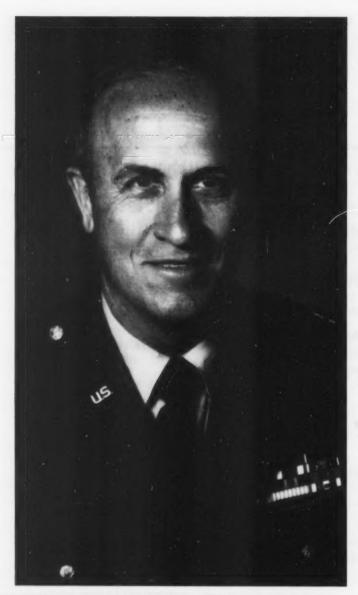
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from the Commander

On 2 July 1979, Brigadier General James A. Teal, Jr. assumed command of the US Army Intelligence Center and School from the outgoing commander, Brigadier General Albert N. Stubblebine III.

At the change of command ceremony, General Teal addressed the challenges facing the US Army Intelligence Center and School. "The first challenge I perceive," said General Teal, "is to be sensitive to and able to respond to the needs of the tactical commanders, as well as the training needs of the national agencies the Army supports. The second challenge is to develop intelligence doctrine for the Army in total coordination with the rest of the Army. We need a

well structured intelligence architecture that will insure adequate intelligence support for the Army beyond Division 86. We have to deal with the proper balance of men and systems and expedite acquisitions of tactical systems. Military intelligence is more than target acquisition. Getting good equipment in the hands of the users is a critical issue. Looking beyond 1985 all I see are product improvements. Research and development must not become a dry hole for Army Intelligence."

"The third challenge, and it is a great one, is training adequately in the face of continuing manpower and budget cutbacks. On-the-job training will not suffice for most of our hard skill MOS's. This, as I see it, is one of the foremost missions of the

training center."

"The fourth challenge is to improve our soldiers. We must make professionals of our officer and enlisted personnel if we are to maintain credibility with those we support. This is an especially difficult task because of our continued training cutbacks. However, we must not forget that our professionalism extends beyond our military job; it encompasses our duties as citizens in the Fort Huachuca community."

General Teal is the fourth general to command the USAICS, since it moved to Fort Huachuca in 1971. Brigadier General (P) Stubblebine departed Fort Huachuca to assume command of the US Army Electronic Research and Development Command (ERADCOM) at Adel-

phi, Maryland.

Among the distinguished guests at the ceremony were Lieutenant General John R. Thurman III, Deputy Commanding General, TRADOC and Commanding General, US Army Combined Arms Center at Fort Leavenworth, Kansas; Major General Fred K. Mahaffey, Deputy Commanding General, US Army Combined Arms Combat Development Activity at Fort Leavenworth, Kansas; Major General Gerd S. Grombacher, Commanding General, US Army Communications Command at Fort Huachuca; and Brigadier General John S. Blair, Deputy Commanding General, US Army Communications Command.

Captain David R. Bowen is an assistant professor in the Department of Earth, Space and Graphic Sciences, US Military Academy, West Point, New York. Captain Bowen teaches terrain analysis and cartography and is conducting research in computer graphics. He received a BA from Milton College and and MA from Arizona State University and is a graduate of both the Infantry and Engineer Officer Advanced Courses. He has served twice with the 2nd Infantry Division in Korea and has commanded a mechanized infantry company at Fort Carson, Colorado.

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Captain Spracher, a Latin American FAO, is currently assigned to the Social Sciences Department at the US Military Academy, where he teaches government and politics. He has previously served as Battalion S2 in the 1st Armored Division, Operations Officer at the US Army Intelligence Agency, and has commanded at the platoon, company, and detachment levels, most recently as Commander, Administrative Support Detachment,

USAINTA. A graduate of the Armor Officer Basic Course, the Tactical Intelligence Officer Course, and the Postgraduate Intelligence Course at the Defense Intelligence School, he holds a BS degree from West Point and an MA in International Relations from Yale University.

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MAJ Tom holds a BA in history from the University of San Francisco. He is the author of MI Support of Unconventional Warfare, an article which appeared in the July-September 1977 issue of Military Intelligence. MAJ Tom is a graduate of the US Army Command and General Staff College and is currently the OPMS Project Officer for the US Army Intelligence School, Fort Devens.

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CPT Tom is a graduate of the Armor Officer Basic Course, MI Officer Basic and Advance Courses, and the Tactical EW Operations Course. He holds a BA in history from the University of San Francisco and is currently pursuing a Masters program at the Naval Postgraduate School in Monterey, California.

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CPT Nutt holds a BA degree from Austin Peav State University in Clarksville, TN. A recent graduate of the MI Officer Advance Course, CPT Nutt is currently completing her graduate work at the University of Oklahoma's School of Public Administration. Her next assignment will be to the US Army Field Station, Augsburg, Federal Republic of Germany.

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MAJ Anderson, MI Branch, USAR, holds a MOBDES Assignment at USAICS and is in the Foreign Area Officer Program/Reserve Component-Arab World. A 1965 graduate of West Point, he served two tours in Vietnam with the 1st Air Cavalry Division (AM) and the 525th MI Group. He holds an MA in Political Science from the University of Dayton and an MBA in Health Care Administration from The George Washington University. He is a 1978 graduate of the Command and General Staff College. Major Anderson is currently enrolled in the National Defense University National Security Management Program. In civilian life, he is Assistant Medical District Coordinator in the Veterans

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CPT Noone holds a BS degree in criminology from Penn State. While stationed at Fort Carson, Colorado, CPT Noone served as chief of the All-Source Intelligence Center, as battalion S2 and assistant brigade S2 and as an infantry platoon leader. A graduate of the MI Officer Advanced Course, CPT Noone is now assigned to the US Army War College, Carlisle Barracks, Pennsylvania.

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LTC Wheeler commands the 1st Battalion, 179th Infantry, 45th Infantry Brigade (SEP), Oklahoma Army National Guard, based in northcentral Oklahoma with units located in 11 cities.

Educated at Texas A&M, the University of South Carolina, and the University of Tulsa, he holds a BA degree in history and political science, a BS degree in military science, and graduate credit in economics and government.

LTC Wheeler is a graduate of the United States Command and General Staff College, Fort Leavenworth, Kansas; the Industrial College of the Armed Forces, Washington D.C.; and the Defense Civil Preparedness Agency Staff College, Kalamazoo, Michigan.

A branch-qualified infantry and military intelligence officer, he had previously served as the intelligence officer for Oklahoma's 45th "Thunderbird" Infantry Brigade prior to his assignment as an infantry battalion commander.

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Major Gannon is a graduate of Infantry OCS, MI Officer Advanced Course, EW-Cryptologic Officers Course and Command and General Staff College. He has a Bachelor's Degree from the University of Nebraska at Omaha. His assignments include: Detachment Commander, Assistant G-2 Operations Officer, First Cavalry Division, Vietnam; Soviet EW Analyst, USEUCOM Defense Analysis Center; EW Test Officer, TRADOC Combined Arms Test Activity (TCATA), Ft. Hood; S-3 522d MI Battalion, 2d Armored Division, Ft. Hood and he is currently the Electronic Warfare Coordinator for US Army Readiness Region VIII in Denver, Colorado.

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Major Blaylock received his BA in English from the University of Alabama in 1965. He received his MA in History and did doctoral work in Modern European History at the same university. He is a 1965 graduate of the Infantry Officer Basic course and a 1970 graduate of the MI Officer Advanced Course. He was a Distinguished Graduate of the Air Command and Staff College in 1976. His assignments included G2/S2 and REFORGER 77 (Exercise Carbon Edge). He wrote the 3 ID portion of the Intelligence After Action Report for the Chief of Staff of the United States Army. He developed the intelligence concept for REFORGER 79 (Exercise Certain Sentinel) and authored the special Intelligence After Action Report. He wrote "The Lessons of Carbon Edge," an article concerning REFORGER 77, which appeared in the October-December 1978 issue of Military Intelligence.

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Mr. Fauk is a Department of the Army civilian who has been working in the Collective Training Division, Directorate of Training Developments, USAICS since July 1974.

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CPT Kane was an honor graduate of Infantry OCS and was commissioned MI in 1971. A 1971 graduate of the University of Pennsylvania, CPT Kane holds an MBA degree from Harvard University. CPT Kane is a MOBDES living in Massachusetts and is currently enrolled in the US Army Command and General Staff College's non-resident program.

G.I. Bill Authority Helps ROTC Officers

Some officers are having difficulty in getting GI Bill benefits approved through local Veterans Service Centers, say officials at The Adjutant General Center (TAGCEN).

Earlier this year, a TAGCEN news release announced that officers who entered the Reserve Officers Training Corps program before January 1, 1977, and were commissioned and served on active duty before January 2, 1978, were eligible for educational benefits under the GI Bill.

A number of phone calls and letters have been received citing difficulties with local Veterans Service Centers. The Veterans Administration (VA) announced the new policy in Change 9, Appendix P, DVB Circular 20-76-84 in April 1978. Veterans Administration officials say that the change has been circulated throughout the VA organization, but that those officers having difficulties should tell Veterans Service Center officials where to find the policy. The circular has also been distributed to Army installation education services centers

The GI Bill, which provides servicemembers with up to 45 months of financial aid of education programs, was replaced with the Veterans Educational Assistance Program (VEAP). The old GI Bill was ended by Public Law 94-502 for persons entering the service after December 31, 1976. The new VEAP program requires that servicemembers contribute to their own education benefits. The VA provides two dollars for each dollar set aside by the soldier for post-service education.

The ruling applies only to officers who took part in ROTC programs before January 1, 1977, and served as officers before January 2, 1978. All servicemembers who came on active duty after December 31, 1976, are eligible to participate in VEAP.

Editor.

Just a quick note to amplify your Readership Survey. The magazine has continued to improve since its initial publication. If you don't recognize the degree of improvement go back and read Volume 1, Number 1.

You will note I did not propose a theme for future issues. What I have in mind simply would not fit in the space provided. A theme you might explore concerns what has transpired within Intelligence in the past 10 years.

As I sit back and reflect, there is a definite reorientation of, a higher caliber of professionalism from, and greater integration of the MI within the Army. Unfortunately, as we have looked far into the future in intelligence, many of our published statements and many of our "in house" meetings have often stated a capability which we desired but which is still not attainable.

We have tended to talk of the future as though it were already here and by doing so may have created false impressions. I know the rest of the Army does this but I am afraid that we may have done it, perhaps to excess. Agreed, we may have new equipment in the field, but side by side with these new items and concepts there exists to a varying degree, old organization and old equipment which in turn causes reliance on old concepts. For example: In many of the Reserve Component units we still have the AN/TPS-33 GSR. This item of equipment is so old that USAICS no longer instructs in its operation and maintenance.

We are still working with MIDs which are not structured to accommodate the new concepts. The BICC augmentations have not been implemented in many organizations. Many of our units, especially in the Reserve Components, are still manned at a level which would not provide for handling increased data/information flow. Manning and MOS authorizations do not allow for production of intelligence at the accelerated rate of combat. Organizations cannot interface in many cases because of communication problems.

Therefore, the theme might be something to the effect that "We

have come a long way at the head of the column but the tail is still a long way behind." If we went to war tomorrow we would find many varying capabilities, conceptions and organizations fighting side by side. Where are we today and where will we be for the next few years in view of the wide variations? Obviously, we would have to be very careful in any discussions because of classification problems.

Continue publishing lists of proposed themes for future issues. This should generate interest in potential contributors who may be procrastinating on their submission and spark interest in others who would feel the need to comment on a particular subject. As it stands now, someone writes an article and the determination of whether or not it fits or can be used is one of coincidence.

Keep up the good work. As one of the founding fathers of the magazine, I am very proud to say that I had a hand in its beginning and that "you have come a long way baby."

Ross F. Mayfield, Jr. COL, Armor Senior Army Advisor Former Director of Training Development (USAICS)

Editor.

My only criticism is that too many of the articles read like something from Reader's Digest and that the higher the author's rank, the heavier the "goody two shoes" approach.

You also write down the nose toward the Reserve Components. In this job, I see both the Active and Reserve side of MI. The real skill is in the Reserve Component although the active troops do do a nice job of shining boots and being noncontroversial, getting tickets punched and occasionally jumping out of airplanes. In foreseeable wars or police actions upon which we might embark, I sincerely doubt that these skills will be very much in demand.

Having said all this, your efforts are appreciated; you have come a long way in a very short time as things in this line of work are measured and I hope your good efforts will be continued.

COL George F. O'Connor MI, USAR

Command Security Officer Defense Logistics Agency DCAS-Los Angeles

Military Intelligence Magazine
has strived to cover the Reserve
Intelligence effort in past issues
but our success has been limited
by input from the field and from
reservists.

We would be very interested in any articles you and other reservists might provide us so that we may better present the Reserve Component in future issues. Editor

Editor,

I noted with great surprise my name in the Feedback section of the April-June 1979 issue (one of your most outstanding issues). I must, however, take exception to the comments of MAJ Zlotnik concerning Notes from the Past.

Having spent two complete tours in RVN (1968 and 1972), I think I can speak with some authority on the validity of MAJ Howard's article.

All of us did not have the opportunity to serve as line officers like MAJ Zlotnik. Our views and perspectives of the war were of course much different from those of men on the line. That does not, however, make them any less true or valid. I was in Saigon during TET offensives—having arrived the day before. I can vouch for the confusion of the first couple of days: my only weapon was a knife since there were not enough weapons available.

War is not all glorious, with heroic charges up hills. Most of it is just ordinary people doing ordinary tasks to the best of their ability. Unless one is in direct combat, war can be very dull and ordinary.

Keep up the good work—the magazine is becoming the equal of such as *Military Review, Army, Infantry* and the other professional magazines.

Theodore Stahr, Jr. MAJ, MI, USAR

Editor,

The article "Soldier or Linguist?" by LTC Don Gordon (April-June 1979 issue) was truly outstanding for its portrayal of

(Continued on page 55)

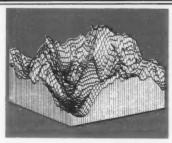
by Captain David R. Bowen

Introduction

The rapidly developing technology which enables one to display digital terrain information by means of computerized graphics offers a new and innovative tool for terrain analysis. Being able to visualize the physical landscape in three dimensions and from any direction, either by oblique or perspective viewing, should be an asset for planning military operations. Near real-time computer graphics of the present or future battlefield could greatly assist the commander and his staff in making critical tactical decisions. The models contained in this presentation have not been tested to any great degree in the field; however, applications and testing of computerized terrain modeling began at the United States Military Academy this past summer. The author has some recommendations for the use of automated graphics that could assist in the analysis of terrain.

The representation of a threedimensional (3-D) topographic surface in two-dimensional (2-D) form is difficult for most people to comprehend.1 Examples are 2-D standard topographic maps, conventional aerial photographs, and satellite imagery which are used to help us first visualize and then analyze terrain. Terrain is quantitatively represented by placing isolines (contours) with equal intervals based on scale on the topographic map. Unfortunately, although contour lines cartographically depict elevation data in a manner easy to quantify, many people still have trouble "visualizing" the terrain represented.2

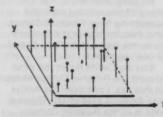
In the last several years, automated cartographic techniques have produced two forms of 3-D



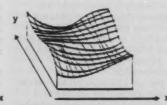
views that attempt to give us a more readily visible representation of a topographic surface: 3-D perspective views and 3-D oblique projections of terrain profiles. The purpose of this paper is to define and examine both of these computergenerated, 3-D views and to discuss possible applications in terrain analysis with these and other new automated graphics.

A data base must first be established in order to create 3-D computer maps that effectronic digitization of the established grid records the X and Y locations for control and the "Z" values for discrete elevation measurements. The Z values are normally recorded on magnetic tape and used in conjunction with appropriate computer software programs to produce digital terrain models (DTM). Planimetric details and vegetation information, also recorded on tape, can be overlaid on the DTM if desired. (See figure 1.)

It should be noted that the grid method is currently being replaced by a rigorous mathematical approach to analytic surface modeling.⁵ This new and faster method creates more accurate surfaces as a result of less interpolation between control points. Also, lines drawn between control points are uniformly smoothed during interpolation to give both aesthetic value and improved accuracy to



Original Data Points



Digital Terrain Model (DTM)

FIGURE 1. Grid method used to establish control points for digitalization.4

tively and accurately depict the terrain. The elevation and planimetric detail (e.g., roads, ditches, rivers, etc.) that form the composite data base are selected from established control points. Control points are recorded from topographic maps, aerial photography, ground-truth surveys, and reconnaissance. A grid pattern is established according to the accuracy desired and overlaid in the area of study. Elec-

the surface represented.

The 3-D perspective view is graphically displayed and produced by computer-plotted profile lines. These lines result from connecting discrete elevation measurements (Z values) taken at regular intervals along a straight line or profile. Successive profile lines are plotted and separated by a constant interval of the user's choice. (See Figure 2.)



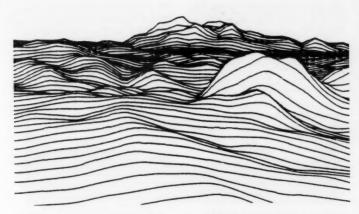


FIGURE 2. 3-D perspective view of Cache, Oklahoma(ETL, 1977).6

The oblique projection of terrain profiles, as with perspective views, also creates the impression of three dimensions by use of computer-plotted profile lines. The basic difference between the oblique and perspective projection is that the projecting rays are parallel in the oblique projection whereas the rays come together at a distant point in the perspective projection. Figure 3 is an example of a 3-D oblique projection viewed from a northwesterly direction.

Figure 4, showing the same area as Figure 3, is a generalized

topographic map with a standard orientation (north at the top). Which of these two maps do you think offers a better visual impression of the terrain?

The US Army Engineer Topographic Laboratories (ETL), Fort Belvoir, Virginia, have identified the oblique projection as the more suitable and efficient of the two 3-D views for presenting terrain information for the following reasons:

 The plotted lines are parallel on the surface and in the projection, which gives a more metric portrayal of the surface.

 Distances are represented accurately, since there is no change of scale when transferring from one profile to another.

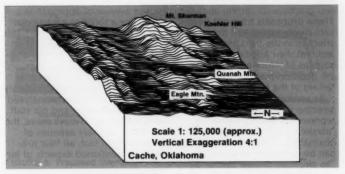


FIGURE 3. 3-D oblique projection of Cache, Oklahoma (ETL, 1977).*

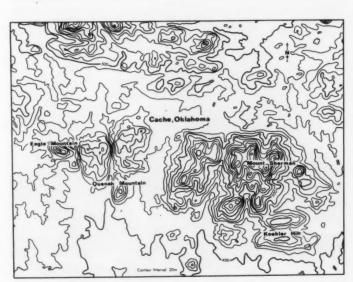


FIGURE 4. Topographic map of Cache, Oklahoma.

 The oblique projection tends to retain a constant scale, while the perspective view's scale is variable.

4) Current computer software is more efficient with large data sets when producing oblique views than for perspective views.¹⁰

I feel that both the 3-D oblique projection and perspective views are superior to the 2-D topographic map when visualizing the terrain. The question remains, "How can we use these computer maps to better our analysis of terrain?"

A complete analysis of an area for military operations involves many factors that directly or indirectly influence the course(s) of action adopted by friendly forces or the enemy.¹¹ The factor under study in this presentation is the terrain. We analyze the terrain in terms of its five military aspects: observation and fire, cover and concealment, obstacles, key terrain and avenues of

approach. 12 During military operations, we often do not have the opportunity to see the terrain before or after our objectives have been determined. Therefore, the terrain in one's sector of responsibility is studied and analyzed both in advance of and during operation.

The comander and his staff formulate courses of action using topographic maps along with visual and aerial reconnaissance reports. The addition of 3-D computer maps with these traditional tools for terrain analysis would facilitate our selection of courses of action which eventually lead to command decisions.

The following discussion offers possible uses of computer maps and graphics for terrain analysis. These proposals have not been exclusively tested and proven effective in the field. However, I feel that their addition as further sources of information will aid the decision-makers on the battlefield of the future.

As seen in Figures 2 and 3, selected areas of the terrain represented are not visible (or "masked") due to landform obstruction. This disadvantage can be overcome by changing the direction of view and/or by elevating the viewer's sight platform (above ground viewing level). These changes can be accomplished interactively by the user at a computer terminal. The resulting new view will appear on the cathode-ray tube (CRT) screen almost immediately. Therefore, the commander may "observe" the battlefield from any desired location, even from the enemy's viewpoint. Likewise, he can determine fields of fire from virtually any point on the battlefield, friendly or enemy.

With the automated superposition of planimetric detail and vegetation information on the 3-D views, the commander can visually realize the effects of cover and concealment of either force. Obstacles, natural or manmade, which will ultimately affect the course(s) of action developed and selected, also may be superimposed over the 3-D base terrain map. Additionally, the three-dimensional aspect of the oblique view helps one to "see" the terrain's channeling effect in certain areas where the engineer can recommend likely areas for placing minefields and other obstacles.

"A key terrain feature is an area whose seizure or control affords a marked advantage to the occupying or controlling force."13 The 3-D views cause the terrain to "pop up" from the page. This visual impression of terrain offers the commander/ analyst a unique tool to consider choices of key terrain. A common fault of 3-D views is that vertical exaggeration is applied by the programmer/user to enhance the graphic effect. The commander/analyst always must be aware of this form of cartographic manipulation, as with plastic relief maps, when selecting key terrain.

"An avenue of approach is a route for a force of a particular size to reach an objective." ¹⁴ This "route" is probably the most critical element of a terrain analysis, be it for an offensive or defensive operation. The other four aspects of terrain previously discussed are critically analyzed by the commander and his staff and influence, in most cases, the selection of likely avenues of approach. In fact, all four previously mentioned aspects of ter-

rain are used to determine the likely avenue(s) of approach. 15 Viewing Figures 2 and 3 again, one should now begin to appreciate the value 3-D views offer the commander/analyst when developing courses of action based on the selection of avenues of approach.

Two other computer-generated graphics have been produced by ETL which can also aid our analysis of terrain. The radar masking diagram, Figure 5, and the line-of-sight profile, Figure 6, have potential as additional tools to analyze the military aspects of observation and fire, cover and concealment, and obstacles.

Radar masking diagrams are represented by clear and lined areas, with the subject's position at the center of the circular disk. Lined areas are hidden (masked) from observation/radar, while clear areas represent areas visible to observation/radar. These computer graphics, based on the same data base concept as 3-D views, would aid in weapon and obstacle emplacement, determination of placement of final protective fires of direct and indirect weapons, lanes of safe movement during the active defense. and the location of observation

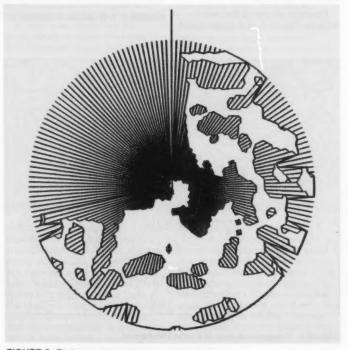


FIGURE 5. Radar masking diagram (ETL, 1978).16

that has the capability of displaying messages and graphics. ¹⁶ Presently in the testing phase, this unit could display the terrain in dimensions to small-unit leaders by one of the two methods already discussed.

Another method of quickly

brigade or battalion level, would have the same capability as the IDT, with the additional advantages of producing hard-copy plots of the terrain based on user parameters and storing data base information on disks. Requests for 3-D views that have been established and stored on disks would be almost instantaneous.

Several forms of computergenerated maps and graphics have been presented and examined for their possible applications in terrain analysis. The proposals presented concerning their possible use in terrain analysis, I hope, are quite clear.

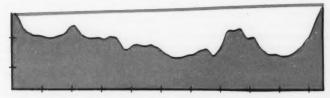


FIGURE 6. Line-of-sight profile (ETL, 1978).17

defensive position.

The line-of-sight profile of terrain would be a valuable aid in determining the proper location of communication equipment (antennas), emplacing weapons, placing forward observers, determining areas that offer protection from indirect fire, and the slope effect on wheeled and track vehicles.

If these new computer graphic tools are found to be an aid to commanders, how then will this information be dispatched to the field? Two methods are the Interactive Display Terminal (IDT) and an interactive CRT terminal with hard-copy plotter and microprocessor.

The IDT, Figure 7 is a handheld, microcomputer-based unit



FIGURE 8. Proposed interactive CRT/plotter/microprocessor station.20

passing terrain information in a three-dimensional display mode is using a CRT linked to a hard-copy plotter and microprocessor with disk drive. This station (proposed in Figure 8), at However, their potential usefulness will not be realized until commanders and staffs have examined and used this new technology in the field.

The groundwork for practical application has begun. This past summer the United States Military Academy integrated 3-D computer maps into the cadets' field training.21 The cadets utilized 3-D maps in several smallunit tactical operations. The project managers are now objectively analyzing the usefulness of these computer graphics as an additional aid in terrain analysis. Whatever the result, one fact remains firm: computer graphics offer a unique way in which to communicate information. For this reason alone, we should continue to research their usefulness in terrain analysis as well as in other fields.



FIGURE 7. Interactive display terminal.19

Footnotes

1 Cyrus C. Taylor, Parallel Profile Plots for Visual Terrain Display, Engineer Topographic Laboratories, Fort Belvoir, Va., September 1977, p 3 Taylor, op. cit.

4 James R. Jancaitis and John L. Junkins, Mathematical Techniques for Automated Cartography, Engineer Topography Laboratories, Fort Belvoir, Va., February 1973, pp 25 and 26.

5 Ibid.

6 Captain John J. Charland, USA, Computer Graphics Laboratory, Dept. of Earth, Space and Graphic Sciences, Military Academy, November 1978. Data Bases and Computer Software Furnished by Engineer Topographic Laboratories. Fort Belvoir, Va., 1977 and 1978.

7 Taylor, op. cit.

8 Charland, op.cit.

9 Elevation data compiled from Cache, Oklahoma, 1:50.000 map sheet 6253 11, Topographic Command, Washington, D.C., 1970 and Cache, Oklahoma, 1:50,000 map sheet 6253 11, Automated Cartography Branch, Engineer Topographic Laboratories, Fort Belvoir, Va., November 1972.

10 Taylor, op. cit.,

11 FM 30-5, Combat Intelligence, Department of the Army, Washington, D.C., 30 October 1973, p B-I.

12 Ibid., p 2-20. 13 Ibid., p 2-21.

14 Ibid., p 2-22.

15 Ibid.

16 Charland, op. cit.

17 Ibid.

18 "Interactive Display Terminal (IDT)," Infantry, September-October 1978, pp 8 and 9.

19 Ibid., p 8.

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21 Captain John J. Charland, USA. Applications of Digital Terrain Elevation Data at West Point, Military Academy, November 1978, pp 11 and

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*************** Announcing: The Military Intelligence **Humor Contest**

Military Intelligence Magazine Humor Contest Rules:

1. Original cartoons, chestnuts or anecdotes will be accepted. Cartoons must be drawn in ink on 8 by 10 inch paper. Chestnuts and anecdotes must be typewritten and double-

2. Subject must relate to the civilian or military (any service) intelligence effort (personnel, equipment or activities). Subject may be fictional in nature if it could represent realistic intelligence events.

3. Subjects cannot be of a classified nature. 4. All submissions become the property of Military Intelligence Magazine and may be

published at the discretion of the magazine staff.

5. The name and address of all contestants must be on the submissions.

6. Prizes will be awarded upon publication of the winning submissions in the January-March 1980 issue. First prize: \$50.; Second prize: \$25.; Third prize: \$15.

7. Submissions will be judged for originality, subject, and humor.

8. Submissions must be postmarked no later than midnight, December 31, 1979.

9, Send entries to: MI Magazine Humor Contest, P.O. Box 569, Fort Huachuca, AZ

The "Lawfulness" of Intelligence Operations

by CPT William C. Spracher

At first glance, the title of this article may seem somewhat awkward, or at least an odd way to describe intelligence operations. The term "lawfulness" is strange to the practitioner's ear, much more attuned to hearing intelligence activities evaluated in terms of their "usefulness" or "legality."

Is there really a difference between "legal" and "lawful?" After all, no rational intelligence professional would consider embarking on an operation that is legal but of virtually no use or, on the other hand, potentially useful but blatantly illegal. But my theme here is to submit that an intelligence activity which is legal is not necessarily lawful, and that the latter criterion should be carefully weighed before implementing the operation.

While working at the tactical level as a battalion S2, the world of intelligence seemed distinctly black and white. It was not until I moved to the strategic level and later augmented my practical experience with some international relations theory that!

The nature of the role intelligence plays at the national level, specifically in support of foreign policy-making, appeared much less clear, though its usefulness was never in doubt. "Black" and "white" had fused into a broad gray area, and it is this that most concerns me. Indeed, at the national level, where intelligence operations have been most controversial, the interface between intelligence and political decision-makers is an important issue.

In many situations I have observed or studied, the usefulness of a proposal to employ a certain intelligence technique seemed to require a temporary waiving of its illegality in return for long-term benefits. In others,

the pernicious illegality of the act clearly overrode any positive gains. Nevertheless, in all too many instances, the trade-off between usefulness and legality was so problematic that appropriate guidance was evident only in hindsight when it was too late to rectify damage or embarrassment.

In this essay I shall borrow ideas from a particular school of thought within the field of international law to suggest an alternative method of considering this problem, for the political decision-maker who must bear responsibility for policy blunders and for the intelligence official who must shoulder the blame for intelligence failures.

The "public order" school was pioneered by the recently deceased law and social science theorist, Harold D. Lasswell. Trained early as a psychologist, Lasswell later applied psychological/psychoanalytical concepts to the study of politics and international law. He and his followers began to speak of laws not as static rules but as "norms" transmitted by a process of communication between communicator and target audience. How a norm develops, attended by certain expectations of the involved parties operating from different types of power bases and according to different base values, is set out in a framework called the "world constitutive process.

These scholars questioned the practice of determining the lawfulness of certain international action merely by referring to existent laws, treaties, legal precedents, etc. Instead, they advocated searching to see if a norm regarding such practice either existed or was being crystallized. In short, they sought an international custom or pattern of behavior which everyone (or at least those who politically counted) had come to expect and deemed right, irregardless of specific laws prescribed by

national legislatures. Such a custom is merely a process of interaction or "interface" among the relevent players.

Identifying such a norm was considered much more difficult at the international level than domestically, as I would assert is also true for strategic versus tactical level intelligence operations. For example, the act of a Division G2 dispatching a reconnaissance patrol in combat seems more "lawful" than the **National Security Council** approving a covert operation within a country with which we are not at war. Legal precedent does not help us much here, since both activities are "legal" according to the static rules of the game.

Lasswell disciples are guided by two criteria in determining whether an activity is lawful: (1) Does it contribute to minimum world order?

(2) Does it violate the fundamental precepts of human dignity?

Such soul-searching may appear hopelessly utopian and not very operational. I would suggest that, when adapted to the specific situation and understood by all the relevent actors in the decision-making process, these criteria help the actors decide whether to authorize a particular intelligence operation. This is especially true when the basic questions (Is it useful?" and "But is it legal?") do not permit a logical conclusion to proceed with or suspend an operation.

The criterion of minimum world order involves the goal of maintaining peace and equilibrium in the world by using the least amount of violence possible. Numerous examples can be cited of operations that qualify on that score. For instance, using national surveillance means for verification of SALT accords obviously contributes to world order. Even if Congress for some domestic, political reason were to enact a statute outlawing

such reconnaissance, the activity, in my opinion, remains lawful, although technically illegal. Of course, the threshold would be passed if possession of this capability (or the denial of it by Congress) unilaterally increased tensions to the point that a potential for hostilities arose. Then, with the possibility of violence enhanced, minimum order would no longer be a likely outcome and the activity would become unlawful.

The second criterion poses more problems for intelligence operations as practiced by the US. Here, the protection of human rights comes into play, along with concomitant implications for interference in other nations' internal affairs and diplomatic relations by setting up a network of implicit or explicit linkages.

This is a perplexing area, especially when realizing that actions aimed at achieving longterm human rights might necessitate violence in the short run, or those aimed at a peaceful, stable world order might call for a temporary usurpation of human rights. But these are moral issues the decision-makers themselves must confront, as openly and democratically as possible. To intelligence officials called upon for input, I propose no actions be recommended that obviously violate either condition.

For example, though a planned covert operation could potentially turn around a totalitarian regime, leading it toward more democratic methods and fundamental citizens' rights, the assassination of the dictator to speed the process could not be justified. Such an act would violate the first criterion and therefore be unlawful. The indiscriminate domestic wiretapping of US citizens without their knowledge is also unlawful, because, by denytheir privacy the second criterion is violated.

It should not, however, be inferred from this discussion that certain categories of intelligence operations are always lawful while others are always unlawful. Here again, I must stress the dynamic nature of international law, expressed eloquently by political science professor and former State/DOD consultant Hans Morgenthau:

Traditional international law and organization derive from a pluralistic, relativistic conception of the state system. Divergent as well as parallel and identical national interests are codified in international law...Accommodation and compromise are therefore the necessary political earmarks of such a legal system.²

Hence, we must continue to evaluate our intelligence operations and weigh their variables on a case-by-case basis, although the public order criteria do provide an adequate starting point.

Now that we have studied the requisites for determining the lawfulness of an intelligence operation, you may be wondering if that is enough. Of course not. I am merely providing a lowest-common-denominator theoretical framework because believe the conditions for lawfulness have too often been overlooked in the past. Just because an operation is lawful does not mean it should automatically be implemented. On the other hand, it could be argued I am not being restrictive enough. Why not strive for optimum instead of minimum world order? Why not shoot for perfection and seek the ideal? Political scientist Robert Dahl cautions us:

What is an optimal system for making decisions is not necessarily what we ordinarily think of as 'ideal.' In fact the optimal is almost always different from the ideal...The optimal may be a good deal less dramatic than the ideal, but it does recognize that there are many important values in this world and that usually you cannot maximize one value indefinitely without creating astronomical costs to another.³

Obviously, within a public order situation, there are count-less base values competing for attention and scarce resources (desire for security, health, food, etc.). A minimal approach which satisfies all of them to some degree, but not at the expense of others, seems most appropriate. The optimal path, and certainly the ideal one, is simply unrealistic and overly optimistic.

Another common method of investigating trade-offs is the so-called "Pareto optimum" (first espoused by Italian sociologist Vilfredo Pareto). This criterion,

which states that a decision should be taken if some people's values will gain and everyone else will remain at least as well off, is normally accepted as a guide for public decisions but does not cover cases in which one person's values must be traded off against another's. Unfortunately, according to John Steinbruner of the Brookings Institution, most public issues of interest do present such tradeoffs. Information is processed and decisions are ultimately made by individuals; the determination of value ultimately resides with the individual 4

I agree that the game of intelligence analysis is a highly individualistic one. Collegial decision-making is merely a synthesis of individual views, supported by individual inputs from members of the intelligence community. Notwithstanding the significance of the individual. however, it should be remembered that there are also group values to be taken into account. As Roger Hilsman, former Director of the State Department's Bureau of Intelligence and Research, reminds us, "Organizations have interests of their own that are sometimes more than the sum of the interests of the individual members of the organization."

At any rate, virtually all intelligence officials operate not by Pareto guidelines but by a zerosum-pie approach, i.e. if "they" gain, "we" lose, and vice versa. It is not human nature for an intelligence official to recommend an operation that will benefit both friendly and enemy forces. Indeed, such altruism is not a basic aspect of any intelligence organization anywhere. Nevertheless, a minimum public order regarding intelligence is invaluable in that it implies mutual security for both sides by providing such beneficial services as early warning of hostilities and verification of arms accords.

Once we deem what is lawful by public order considerations, we must further evaluate intelligence operations according to whether they are, in fact, desirable. Many different ways of doing this have been described. Here are a few questions which should be part of the decision process:

(1) What are the chances for

(2) Are there other sources/ methods available which are less expensive or risky?

(3) Even if there are other sources targeted toward the same goal, is repetition or duplication

considered beneficial in this case to provide confirming

information?

(4) Is the other side using similar methods against us, and is quid pro quo (something given or received for something else) diplomatically feasible?

(5) Does the end justify the means?

These questions are valid and should be carefully considered only after the criteria of lawfulness are examined.

Frequently, one gets caught in purely functional arguments over utility (e.g. whether an operation best reveals intentions or capabilities), cost-effectiveness, or efficiency. The means often are confused with the ends, or one becomes enmeshed in legalistic debates over how to exploit loopholes in Executive Orders, US statutes, or unit regulations.6 Such efforts are not worthless, for usefulness and legality are important. But excess attention to these issues can blind one to the deeper moral ramifications of intelligence operations.

Although it may sound otherwise, I am not advocating a crash course in ethics for all intelligence practitioners. There is no scarcity of attention to ethics, as can be witnessed in classes in any Army basic or advance course, ROTC department, or service academy.

Though commendable, such courses are too often programmed in reaction to scandal or bad press. Hence, there is a negative ("Thou shalt not") connotation to these efforts rather than the positive ("Thou shalt") approach I am suggesting in my emphasis on lawfulness.

Past abuses have resulted in a great catharsis of intelligence organs, epitomized by numerous investigations by the Senate and Hosue Select Committees, the Rockefeller Commission and increasing IG involvement in intelligence planning.

This trend is generally healthy in that the agencies no longer have a carte blanche. But the

whole investigatory environment has been mostly negative in outlook, slapping wrists for past misdeeds without providing constructive guidance for the more efficient accomplishment of future tasks. Naturally, most of the attention has focused on issues producing the greatest sensationalism and public outrage: drug experiments, assassination plots and break-ins.8 Much less notice has been taken of those operations comprising the bulk of intelligence activities.

Similarly, negative thinking has gone into the rewriting of "rules" for the intelligence community. In a press conference on 6 September 78, President Carter stressed adherence to ethical rules of the game while lauding the Foreign Intelligence Surveillance Act, which he described as one of the most significant legislative initiatives involving intelligence agencies in three decades because of its establishment of the nation's first legislative controls over government-conducted foreign intelligence surveillance. He added:

The bill also assures intelligence officers who serve our country that their proper activities in this field will be authorized by statute. By providing clear statutory standards, this legislation will help strengthen the ability of our intelligence agencies to deal with foreign espionage and international terrorism.9

Since then, there have been indications that the administration is working with Congressional oversight committees on additional legislation concerning surveillance of American citizens living abroad, to include comprehensive charters for intelligence agencies.

Without downplaying the importance of such legalistic solutions to prevent abuses, I must assert that one cannot legislate effectiveness or morality. These come from the heart and mind of the individual. His interpretation of how an operation can contribute in a positive sense is much more significant than the mere avoidance of criminal acts and legal sanctions. The "rules of the game," which Harvard professor Graham Allison suggests "stem from the Constitution, statutes, court interpretations, executive orders,

conventions, and even culture," are important, but they are not everything.11 Or as his former colleague Morton Halperin qualifies the premise of his book on bureaucratic politics, "the rules do not dominate the process, although they do make a difference to the extent that they structure the game."12

Only a few weeks before his statement on the legislation, the President addressed a group of employees at CIA headquarters: You almost are in the position of being like Caesar's wife; you have to be even more pure and clean and more decent and more honest than almost any persons who serve in government, because the slightest mistake on your part is highly publicized and greatly magnified, and they certainly are never exaggerated. There have been too many shocks, too many rapid changes in the past, but the policies that have now been established by Executive Order, by sound decisions, by cooperation, and in the future by law, will give you a much surer sense of what the future will bring, will liberate you individually, in effect, to make your own beneficial impact in our country be even greater. I know how serious uncertainty is in a person's life. 13

An important point to note in this passage is that Carter realizes that enacting laws takes time; he is aware of the "future" quality of lawmaking. Rarely is a law on the books a priori, before an incident giving rise to a need for it occurs. Therefore, we require a guide for the present. "Lawfulness" as I have described it serves as a suitable guide while we wait for "legality" embodied in specific laws and rules to be formulated and legislated.

Some of the darkest deeds of the intelligence community are performed in anticipation of future laws proscribing such acts. I have personnally witnessed this syndrome of "getting it done while it's still legal" in such activities as the purging of as many dossiers with objectionable contents as possible before an official moratorium on destroying them (which everyone knew was coming) was announced. The same reaction was evident prior to the effective

dates of the Freedom of Information and Privacy Acts. Needless to say, such actions were not illegal, but their lawfulness can certainly be questioned. I hope this discussion is not interpreted as a self-righteous assertion of discerning right from wrong. Surely, we have all erred on the side of unlawfulness, even with honorable intentions. Instead, my purpose is to arouse the reader to consider (or devise) guides for action that are more than just technical rules, reactionary ethic or ex post facto legislation.

I mentioned earlier how mundane arguments tend to obscure the deeper moral purposes of intelligence operations. Everyday facts of life in intelligence organizations contribute to this shortsightedness. For instance, there are the usual quirks of bureaucratic politics that beset all organizations. The military intelligence community in particular is plagued by parochialism, which Allison claims is enhanced by the selective information available to organizations.14 He also suggests that organizational momentum is a problem in the intelligence business since "a program, once undertaken, is not dropped at the point where objective costs outweigh benefits."15 This is especially serious in HUMINT, where it can take years to set up an operation and gain access to the target. Naturally, there is organizational inertia against terminating such an effort even when its costs become obvious.

We are all aware of the backlash effect of intelligence failures on both policy-makers and intelligence personnel, wherein policy can affect intelligence and vice versa.16 There is also the preoccupation with doing something "in the national interest. But the national interest is often highly ambiguous and difficult to define, as is the equally fuzzy concept of "national security." Intelligence organizations are sometimes hampered by publicity surrounding their involvement in "leaks." This technique is both good and bad in that it is quite handy for the policy-maker who wants to "plant" some information without making it appear deliberate, but can have a negative impact, especially on intelligence elements, when the leak is mishandled.¹⁷

Finally, stemming from my previous emphasis on the individual, there is the problem of each of us being led astray by our own biases. One psychologist applying psychological precepts to foreign policy feels the organization itself must institutionalize a procedure that forces officials to try to disprove their own beliefs, (i.e. a routine procedure for systematically searching out information that goes against its view of reality).18 I am skeptical that this is workable at the collective level. As Allison and Halperin correctly point out: "Intelligence organizations are not perfect and neutral transmission belts. They notice what their images of the world lead them to think will be important to senior players. They report events and opinions according to established procedures and in ways designed to protect their own organizational interests."15 But I am confident that the individual, applying the criteria of lawfulness, can begin to overcome personal biases and in some small way benefit the organization. These are just a few of the concerns that can blur the vision of the ablest intelligence professional and complicate his basic desire to propose operations that are useful, legal, and above all lawful.

Publicity in regarding intelligence abuses in recent years has led to cries for reorganization, new restrictions, purges of leadership, and myriad other "quickie solutions." For instance, Allison and Peter Szanton, formerly with the Murphy Commission, suggest that the revelations "provide a rare opportunity to rethink and restructure the US intelligence community."20 They proceed to churn out the standard nuts-andbolts recommendation for structural reform that floods the literature. However, would not a rethinking of fundamental values and purposes be more on target? Likewise, we need more emphasis on the quality of intelligence operations rather than the quantity. Too great a volume of intelligence data has contributed to some of our most blatant failures due to excess "noise" hindering analysis. Moreover, overzealous activity on the international scene can be counterproductive and hazardous to our relations with other nations.²¹ Instead, we should seek to cultivate and improve our most useful, reliable, and lawful intelligence sources and discard the rest.

In conclusion, what I shall call intelligence "deepening" is sorely needed. The term is used by economists to describe the process whereby capital available to developing countries improves not just in quantity, but in quality, reliability, and per capita distribution. By the same token, a basketball coach is rated by the "depth" of his bench, not length. In other words, we must strive to better plan, implement, and integrate our intelligence operatons, relying in the future on accuracy. feedback, and cross-checking instead of sheer mass, which is both risky and expensive.22 Above all, we should keep in mind that intelligence activity is just one "strategy" toward achieving (and maintaining) world order, to put it in the Lasswellian jargon, as are the other familiar "instruments," diplomatic, military, economic and ideological. These should be utilized as means to an end, not as ends in themselves, in lawfully promoting a stable and cooperative global society.

Footnotes

1. For a more thorough discussion of the decision process involved in assessing value positions, see Myres S. McDougal, Harold D. Lasswell, and James C. Miller, The Interpretation of Agreements and World Public Order (New Haven: Yale University Press, 1977), pp. 55-62. See also McDougal, Lasswell, and Michael Reisman, "The Intelligence Function and World Public Order," Temple Law Quarterly, Vol.46, 1973, p.365.

2. Hans J. Morgenthau, "Emergent Problems of United States Foreign Policy," in Karl Deutsch and Stanley Hoffmann (eds.), The Relevance of International Law (Garden City, NY: Doubleday, 1971), p.78.

3. Robert A. Dahl, After the Revolution? (New Haven: Yale University Press, 1970), pp. 48-49.

4. John D. Steinbruner, The

5. Roger Hilsman, The Politics of Policy Making in Defense and Foreign Affairs (NY: Harper and Row, 1971), p.41.

6. For the complete text of the January 1978 Executive Order on US Intelligence Activities, see American Intelligence Journal, Vol. 1, No. 2, Special Supplement, 7 Feb 78.

7. For example, at the US Military Academy, one of the reasons for redesignating and upgrading an office to departmental status was to place institutional stress on the teaching of ethics. See MAJ Steven Hammond, "The Evolution of an Academic Department: Behavioral Sciences and Leadership," Assembly (published by USMA Association of Graduates), Dec 78, pp. 16-17, 36-37. For a more general and historical discussion on this subject, see "Ethics and the Military Profession," Assembly, Mar 79, pp. 12-13, 31-33. An insightful discourse on ethics within the intelligence community written from the consumer's viewpoint is presented by a former Director of Current Intelligence in the CIA, who remarks that "to some the mere juxtaposition of ethics and intelligence may appear to be a contradiction in terms. But at heart, intelligence is rooted in the severest of ethical principles: truth telling." See E. Drexel Godfrey, Jr., "Ethics and Intelligence," Foreign Affairs, Apr 78, pp. 624-642.

8. US Senate, Final Report of the Select Committee to Study Governmental Operations with Respect to Intelligence Activities, 94th Congress., 2nd sess., 14 Apr 76, 7 vols. For brief accounts of specific abuses see, for example, George Riley,

"Gray Mail: Corporate Bribery and the CIA," Multinational Monitor Winter 1978-79, p. 13, and "Who Can Be a Paid Spook?" Time, 9 Jan 78, p.

9. Jimmy Carter, "Statement Urging Passage of Legislation," in Selected Statements (published by the US Air Force as executive agent for DOD), No. 78-9, 1 Oct 78.

10. Nicholas M. Horrock, "Limits Urged to Spying on Americans Overseas," New York Times, 19 Feb 79, p.

11. Graham T. Allison, Essence of Decision (Boston: Little, Brown, 1971), p. 170.

12. Morton H. Halperin, Bureaucratic Politics and Foreign Policy (Washington: The Brookings Institution, 1974), p. 115.

13. Jimmy Carter, "Remarks to CIA Employees," in Selected Statements, No. 78-9, 1 Oct 78.

14. Allison, op. cit., p. 81.

15. Ibid., p. 91.

16. For an intriguing look into this problem by a former staff member for the NSC and the Senate Select Committee on Intelligence, see Richard K. Betts, "Analysis, War, and Decision: Why Intelligence Failures Are Inevitable," World Politics, Oct 78, pp. 61-89. On the specific case of intelligence failures regarding Iran, See Richard Burt, "President Criticizes Intelligence Effort on Crisis Prediction," New York Times, 23 Nov 78, pp. A1, A6. Also refer to an editorial in the Washington Star, 28 Nov 78, with excerpts quoted in "An Intelligence Failure?" Army Times, 18 Dec 78, p. 15. For recent criticism of the CIA "bottling up" information crucial to the SALT negotiations, see Burt, "Soviet Reported to Add Load to Missile Can Fire," New York Times, 14 Mar 79, pp. A1, A7.

17. Richard Burt, "Leaks May Be

Inevitable in the Ship of State," New York Times, 18 Feb 79, p. E4. For another sanguine view see H. Bradford Westerfield, "Congress and Closed Politics in National Security Affairs," Orbis, Fall 1966, pp. 737-

18. Joseph de Rivera, The Psychological Dimension of Foreign Policy (Columbus, OH: Charles E. Merrill, 1968), p. 61.

19. Allison and Halperin, "Bureaucratic Politics: A Paradigm and Some Policy Implications," World Politics, Spring 1972, p. 59.

20. Peter Szanton and Graham Allison, "Intelligence: Seizing the Opportunity," Foreign Policy, Spring 1976, p. 183. For a critique along the same lines I am pursuing, see comments by George A. Carver, Jr., and Halperin in the same issue. Also see a follow-up by William E. Colby. Walter F. Mondale, Szanton and Allison, "Reorganizing the CIA: Who and How," Foreign Policy, Summer 1976, pp. 53-63.

21. Professor Karl Deutsch warns us that in "world politics, world economies, and world opinion, the very magnitude of our thrust into international affairs has produced some limiting or countervailing responses from the international environment...the essentially unilateral expansion of our power and influence in the world may turn out to be a self-limiting process." Of course our intelligence effort is part of this overall thrust. Karl W Deutsch, The Analysis of International Relations (Englewood Cliffs, NJ: Prentice-Hall, 1968), p. 98.

22. For elaboration on these points see, among others, COL Thomas W. Fuller, "Fusion Intelligence/Operations," MI Magazine, Jul-Sep 77, pp. 16-19.

Annual Readership Survey

What is your one recommendation for improving MI Magazine?

Readers,

Here are some of your comments from our Annual Readership Survey.

Editor

Better mailing cover...the current cover rips in mailing and I have to scrape tape off the magazine. Sometimes the cover is torn.

Being a dedicated Jarhead, I would appreciate greater coverage of the non-Army intelligence organizations-those of other services, our allies, the neutrals and our opponents.

One article stated that the USAR contains the largest number of units. Let's hear more on the USAR.

Special article dealing with enlisted personnel and intelligence responsibilities.

One of the best articles lately was MAJ Howard's "Notes from the Past." Excellent.

I'd like to see more articles from the men in the combat arms units. The lessons-learned-type article that would benefit all of us. I realize we have the Division G2 Notes from Fort Carson but I don't know if they get distributed

(Continued on Page 26)

CEWI Update

by Major Jeffrey Tom and Captain Ronald Tom

Although much has been written about CEWI (Combat Electronic Warfare and Intelligence), the discussion has centered on doctrinal and organizational concepts, leaving an informational void on the current CEWI status. At this time, the various combat divisions are wrestling with the HOWs and WHYs of turning concepts into reality. For those military intelligence personnel not assigned to a division fielding a CEWI battalion, there is a lack of information on what CEWI is. The concept of consolidating all tactical intelligence/EW systems under the combat commander represents the key to successful intelligence operations on future battlefields.

This article is intended to present the most current information on CEWI. There is an old adage that "those who are up to their necks wrestling alligators often forget their job is to drain the swamp." For those with CEWI battalions in the field, there is seldom time to set down on paper the latest phase in the evolution of CEWI.

This article is a result of two recent events. First, LTC William E. Harmon's "CEWI Battalion Update" (MI Magazine, Apr-Jun 78) depicted the evolution of CEWI for the 522nd MI Battalion. 2nd Armored Division at Fort Hood, Texas. This article is highly recommended. Second, field visits (e.g., 313th CEWI Battalion in the US Readiness Command's Exercise GALLANT EAGLE, October-November 1978) produced valuable information on CEWI. **CEWI Origin**

The CEWI concept originated

from the 1975 Department of the Army (DA) Intelligence Organization and Stationing Study (IOSS) chaired by Major General James Ursano (Ret.). then Director, DA Management Directorate. IOSS resulted in two significant actions. It consolidated the national level Army intelligence organizations such as the strategically-oriented 66th, 525th and 902nd MI Groups and the recently deactivated US Army Security Agency (ASA) into the US Army Intelligence and Security Command (INSCOM). Secondly, IOSS redirected US Army efforts through the integration of Electronic Warfare (EW) operations into the tactical intelligence function.1

CEWI traces its origin to Chapter 2 of the final IOSS report, dated 1 August 1975. This chapter discussed the separateness of Army organizations providing electronic warfare and intelligence support to Army commanders at corps and below as a weakness of the existing system.2 CEWI was developed to eliminate this weakness by organizing combat electronic warfare and intelligence units for the combat commander at corps and division. It is important to note that both EW and combat intelligence units would be integrated under CEWI. Emphasis on division and brigade intelligence support is greater. Intelligence assets and personnel are being aligned to give the tactical Army commanders (corps, division and brigade) the ability to fight and win the next battle with an integrated intelligence/EW capability. CEWI's development paralleled a theme of the book G-2: Intelligence for Patton in that: "The collection of intelligence information began with the front line soldier. The

division, no matter whether infantry, armor, or airborne, was the keystone to combat intelligence in World War II."³ The author of the book, Brigadier General Oscar W. Koch, further stated:

"It (the division) was a collector of information. indispensable and irreplaceable. The division took prisoners of war. It picked up enemy deserters. It overran enemy wounded and dead. It sent out patrols. It seized enemy command posts, manned observation posts, and established listening posts. It captured enemy materiel. It had reconnaissance platoons and companies and battalions. It had within its own organization the available assistance and support of the intelligence sections of its varied units, plus the professional know-how of ordnance, signal, chemical and engineer experts. It was, in short, the division which was best equipped to provide the intelligence information gained through physical contact with the enemy."4

Patton's G-2 concluded that: "The tactical commander was interested primarily in results with a direct bearing on immediate tactical problems. As collectors of information. however, every one of his attachments sooner or later would pay its way. Each would, at one time or another, furnish basic intelligence information on which a tactical decision would be based. And once they proved themselves, they were not only welcome, they were in demand."5 **CEWI Organization**

The current CEWI organizational concept envisions a CEWI Group organic to corps and a CEWI Battalion organic to the combat division. A type CEWI Battalion is depicted in Figure 1. This is the recommended organization resulting from the DA (TCATA Test FM 362) CEWI Battalion Test conducted at Fort Hood in 1977. The most current organizational document for a

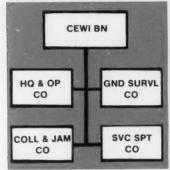


Figure 1. CEWI Battalion (Division)

Test. Figure 2 compares various CEWI battalions supporting the infantry, armor/mechanized, and airborne divisions.

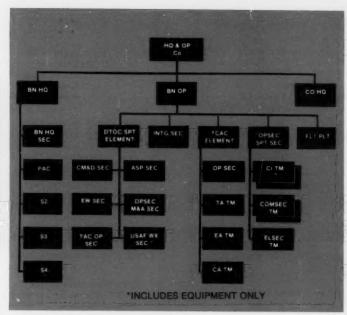


Figure 3. HQ & OP Co, CEWI Bn (Div)

CEWI Bn HQ & OP Co C & J Co GND SURVL Co SVC SPT Co Total INF Div 209 (30 Off, 18 WO, 161 EM) 105 (4 Off, 6 WO, 95 EM) 82 (4 Off, 0 WO, 78 EM) 183 (5 Off, 2 WO, 176 EM) 579 (43 Off, 26 WO, 510 EM) (Source: TOE 30-165H810) ARMOR/MECH DIV 209 (30 Off, 18 WO, 161 EM) 105 (4 Off, 6 WO, 95 EM) 82 (4 Off, 6 WO, 78 EM) 186 (5 Off, 2 WO, 179 EM) 582 (43 Off, 26 WO, 513 EM) (Source: TOE 30-16814820)

*AIRBORNE DIV 116 (15 Off, 11 WO, 90 EM) 149 (7 Off, 7 WO, 135 EM) 108 (6 Off, 0 WO, 102 EM) 184 (4 Off, 3 WO, 177 EM) 557 (32 Off, 21 WO, 504 EM) (Source: 313th CEWI Bn Provisional TOE)

(Note: "The airmobile division's CEWI Battalion will probably be similar in strength to the 313th CEWI Bn.)

Figure 2. Comparison of CEWI Battalions Authorized Strength

Figure 3 depicts the Headquarters and Operations (HQ & OP) Company. From this unit, support is provided to the division G2 staff and the division G3 EW staff officer through the **DTOC** (Division Tactical Operations Center) Support Element. All military intelligence disciplines signal intelligence order of battle, interrogation, operations security, human intelligence, imagery intelligence and EW--are represented to provide an allsource capability.

Figure 4 graphically portrays the Collection and Jamming Company with its three organic platoons. It should be noted that within the new TOE, interrogation and counterintelligence support (previously

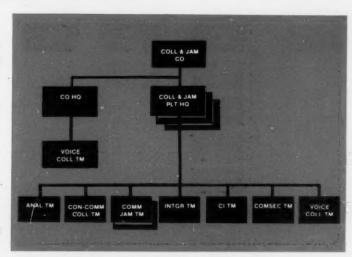


Figure 4. Collection and Jamming Co, CEWI Bn (Div)

Tactical surveillance support in the form of remote sensors and ground surveillance radars is provided to the combat commander by the CEWI Battalion's Ground Surveillance Company (see Figure 5).

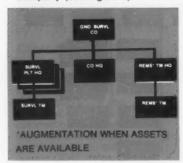


Figure 5. Grnd Survi Co, CEWI Bn (Div)

One of the significant results of the 1977 CEWI Battalion Test was the consolidation of organizational maintenance and the creation of a Service Support Company (See Figure 6). While

YEAR	DIVISION	CEWI BN DESIGNATION
FY 1980	2nd Armored Division	522nd CEWI Battalion
	82nd Airborne Division	313th CEWI Battalion
	1st Infantry Division	101st CEWI Battalion
	3rd Armored Division	533rd CEWI Battalion
	1st Armored Division	501st CEWI Battalion
*FY 1981	9th Infantry Division	109th CEWI Battalion
	5th Mechanized Division	105th CEWI Battalion
	3rd Infantry Division	103rd CEWI Battalion
	8th Infantry Division	108th CEWI Battalion
FY 1982	24th Mechanized Division	124th CEWI Battalion
	1st Cav Division	115th CEWI Battalion
	101st Airborne Division	
	(Airmobile)	311th CEWI Battalion
	7th Infantry Division	107th CEWI Battalion
FY 1983	25th Infantry Division	125th CEWI Battalion
	2nd Infantry Division	102nd CEWI Battalion

*NOTE: The eight USAR CEWI battalions are tentatively scheduled to begin activation in FY 1981 to support the eight US Army National Guard divisions. Plans for CEWI support for the USAR separate maneuver brigades have not been finalized.

Figure 7. Timetable for CEWI Bn (Div) Activation

incumbent upon the CEWI battalion to provide its own vehicle, generator and EW/Intercept equipment the Service Support Company is more efficiently organized than its predecessor.

CEWI Master Plan

Today there are two provisional CEWI battalions supporting combat divisions. The 313th and 522nd CEWI Battalions are respectively assigned to the 82nd Airborne and 2nd Armored Divisions at Fort Bragg and Fort Hood. Provisional CEWI battalions are being organized in the 1st Armored and 3rd Infantry Divisions in Europe. The DA master plan for CEWI envisions a total of 24 CEWI battalions (16 active Army and 8 Army Reserve). If the battle for personnel spaces, equipment and funding is won, all 16 active Army CEWI battalions will be in existence by 1984 (see Figure 7). The first Army Reserve CEWI battalion is scheduled for FY 1981 activation. Personnel acquisition, equipment redistribution and budget contraints must be overcome before full CEWI implementation is realized. For the US Army Reserve, difficulties are compounded by the complexity of their organization in separate brigades rather than divisions. Try to visualize a reserve CEWI

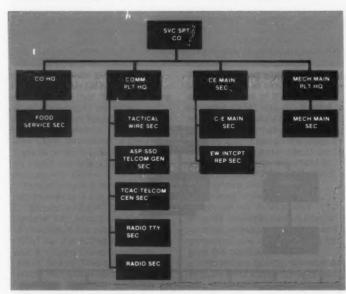


Figure 6. Service Support Co, CEWI Bn (Div)

the division support command (DISCOM) can provide limited avionics, aircraft, C-E and radar maintenance support, it is maintenance. In light of equipment density and the cost of maintaining low-demand, high-cost intelligence systems.

CEWI References

In accomplishing the original objectives of this article, the following is a CEWI publication update:

In retrospect, IOSS and the
CEWI concept are products of
the post-Vietnam emphasis on
giving combat Army command-
ers an integrated intelligence/EW
capability. In this context, the US
Army Training and Doctrine
Command (TRADOC) recently
established CEWI development
as a priority issue. Although
specific CEWI doctrine is being
developed, the fundamental
intelligence principle of getting

stockage, finalization of standard

operating procedures (SOPs)

and individual unit training.

CEWI Doctrine

Hence, until CEWI field manuals (FM) and other doctrinal publications reach the field, the basic combat intelligence/EW

product still remains valid.

the combat commander the most succinct and timely intelligence

,		
	TOE	ARTEP
CEWI Bn (inf Div)	30-165H810	30-165(T)
HQ & OP Co	30-166H810	30-165(T)
CAJCo	30-167H810	30-165(T)
Gnd Survi Co	30-168H810	30-165(T)
Svc Spt Co	30-169H810	30-165(T)
CEWI Bn (Mech/Armor Div)	30-165H820	30-165(T)
HQ & Op Co	30-186H820	30-165(T)
CAJCo	30-167H820	30-165(T)
Gnd Survi Co	30-168H820	30-165(T)
Svc Spt Co	30-169H820	30-165(T)
	TRAINING TEXT	ARTEP
CEWI Group (Corps)		
HQ & Op Co	30-102T	30-102T
Aerial Exploitation Bn	30-105T	30-105T
Tactical Exploitation Bn	30-125T	30-125T
OPSEC Spl Co	30-128T	30-102T/30-125T
EW Bn	30-155T	30-155T

It should be noted that there exists a possibility that all CEWI documents might have a 34-series prefix instead of the 30-series prefix as indicated above. The DA indorsement from the Deputy Chief of Staff for Operations (DCSOPS), dated 29 September 1978, forwarding TOE 30-1565H to the field indicated that all TOEs for CEWI units corps and below should have a 34-series prefix to differentiate them from non-CEWI units in the 30 and 32 series.

The DA (TCATA Test FM 386)
CEWI Group Test for corps levelis tentatively scheduled from
September 1979 to March 1980
at Fort Hood, Texas with the
504th MI Group as test unit. The
504th must be formed under a
CEWI organizational concept
with sufficient lead-time to allow
for MOS-qualified personnel
manning, proper equipment

processes as defined in FMs 30-5 (Combat Intelligence) and 100-5 (Operations) continue to be the foundation for new intelligence techniques and practices. Several proposed FMs tentatively planned for TRADOC publication are:

Although some of these FMs have a publication date of FY 1983, these will form the nucleus of CEWI doctrine.

Conclusion

In this article, we have attempted to provide factual, updated information on CEWI. There has not been detailed discussion on such key topics as CEWI command-and-control, mobility, training, maintenance, EW/-SIGINT equipment system and the effect CEWI will have on the One-Army Concept as applicable to the Army Reserve/National Guard Structure. Military Intelligence plans to feature a series of follow-up CEWI progress articles addressing some of these topics.

LTC Harmon's article describes how the 522nd CEWI Battalion has earned the confidence and support of the 2nd Armored Division. A division CEWI battalion must be recognized as the intelligence collection element responsible for developing real-time all-source intelligence supportive of the commander's combat mission.⁸

If personnel in the newly activated CEWI battalions can accomplish their mission of integrating tactical intelligence and EW, the future of Army intelligence in its support to the combat commander - through CEWI - has great potential. CEWI will give the combat commander "far greater control of intelligence and EW assets than was previously experienced when the intelligence and EW assets were fragmented in bits and pieces around the division responding to a variety of

	,
FM 34-1	CEWI Operations
FM 34-2	Management of CEWI Resources - Corps and Div
FM 34-4	CEWI Communication and Data Links
FM 34-10	CEWI Bn (Div) Operations
FM 34-12	Collection & Jamming Company, CEWI Bn (Div)
FM 34-13	CEWI Platoon Leaders/Team Chiefs Handbook
FM 34-20	CEWI Group (Corps)
FM 34-21	EW Bn, CEWI Group (Corps)
FM 34-22	Aerial Exploitation Bn, CEWI Group (Corps)
FM 34-30	CEWI Company (Sep Bde/ACR)
FM 34-31	CEWI Company (Special Forces)
FM 34-32	CEWI Support for Air Defense Artillery
FM 34-33	CEWI Support to Artillery
FM 34-40	EW Operations
FM 34-41	Jamming Handbook
FM 34-50	Tactical SIGINT
FM 34-52	Tactical DF Analysis/SIGINT/EW Templating

Footnotes

1 - TRADOC Combined Arms Test Activity (TCATA), Final Report of TCATA Test Program FM 362: Combat Electronic Warfare Intelligence (Fort Hood, Texas: TCATA, 1977), p. 1-1. 2 - Ibid.

3 - Oscar W. Koch, **G-2: Intelligence For Patton** (Philadelphia: (Whitmore Publishing Company, 1971), p. 135.

4 - Ibid, p. 135-136.

5 - Ibid, p. 137-139.

6 - LTC William E. Harmon, "CEWI Battalion Update," **Military Intelligence** (Apr-Jun 1978), p. 41.

7 - TCATA Test Report, pg. 1-7.

8 - Harmon, p. 41.

9 - Ibid, p. 43.

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You Can Control Your Radar Can You Control Yourself?

by 1LT Lura Lee Landis

Hypothetical Situations:

The time is the future, the place, West Germany. The opposing force is crossing the border. A 17K on a hillside is monitoring the enemy's movements. He is afraid and his fear turns to panic, speeding his heart rate. He collapses.

The time is next month, the place, say Fort Huachuca. A student who has been getting marginal grades in her intel course nervously prepares to enter the classroom for the final test. She walks through the door, sits down to work and blanks out: she seems to have forgotten everything despite her careful preparation.

The time is now, the place, anywhere. A boss blows up at her secretary, a commander at his S2, a husband at his wife, all caused by a build-up of work frustration.

Some Thoughts on Stress

The above scenarios are played out many times each day. The stress leading to such situations and causing, in turn, more such situations is a contributing

SPECIAL TEXT
THE MANAGEMENT OF STRESS

ORSANIZATIONAL EFFECTIVENESS
SELF STUDY PROGRAM

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FORT ORD CALIFORNIA 93941

factor in uncounted illnesses, personnel problems and failures in mission accomplishment. Stress can, and does, KILL.

In an organization like the Army, preparation in time of peace and performance in wartime create incredible pressures for commanders and soldiers alike. We face continually increasing requirements with shrinking resources and personnel. This makes it critically important that we do not waste available personnel resources

through stress-induced illnesses, failures or communications breakdowns. Our mission depends on this.

Stress can be controlled by proper nutrition, exercise, bio-feedback training, breathing exercises, meditation and/or yoga. Any of these can help us to better cope with the pressures of day-to-day responsibilities and thus better fulfill our obligations to the Army as soldiers.

Had the characters in my hypothetical situations better understood how to control themselves and lessen the effects of stressful situations, the 17K would still be operating his radar, the student would be successfully completing her exam, and boss and secretary, commander and S2, husband and wife would be more effectively dealing with their difficulties.

The Organizational Effectiveness Training Center has published a subcourse on "The Management of Stress" (ST-26-150-1). You can order this subcourse by writing: Commander, USA OETC, ATTN: ATXW-RMA-TD, Fort Ord, CA, 93941. Learn how to cope with stress. Don't let it ruin your day.

facture of their clothing and equipment.

Logistics is the backbone of staying power. The logistician's role encompasses the provision of supplies critical to the combat force, the repair or replacement of damaged equipment, and the maintenance of the mobility required to perform other functions.2 The Army logistician must provide the facilities, materiel and services required during war or peace. This includes the movement and maintenance of the forces. Many argue that, "regardless of the environment in which it must operate, (the Army) will succeed because of, not in spite of, logistics."3

ized for days by the extreme

affect the Russians because

cold. The cold weather did not

these elements were taken into

consideration during the manu-

Management of logistics at unit level requires a commander's continuing attention in order to support the soldier in the field with what is needed, when, where, and in the required condition and quantity. Maintenance and supply are only two of the essential elements of a commander's interest I will discuss.

The ultimate goal of the military supply system is the issue of supplies to the front line soldiers. If this is not achieved, the supply system has failed. Responsive maintenance support requires the availability of repair

Logistics: A Question of Defeat of Victory

by CPT Amelia C. Nutt

Many people in today's Army regard supply and maintenance as purely logistic matters that should be handled independently of other unit operations. Too often misconstrued as dull, complicated and confusing, logistics is left to "log types," resulting in a lack of command interest in a most vital part of a unit's mission.

As one assumes command, one also accepts the management of a logistic support system designed to assist the unit in mission accomplishment. Because combat power is measured in terms of materiel, personnel, and training readiness, success will depend upon how well one develops and uses this capability. It is necessary that commanders at all levels, including military intelligence commanders, are logistically-oriented and aware.

Audits and inspections have disclosed that lack of knowledge, rather than inadequate resources, is the principal cause of logistic deficiencies. There are two common faults of a commander in the logistics area. The first is an inability to recognize a problem; second, once a problem is recognized, the commander may lack the knowledge needed to correct it. There is a definite need to provide officers at all levels with current logistic information and to insure an understanding of procedures and principles in order to avoid these pitfalls.

Of all the areas of interest that require a commander to have assistants and advisors, logistics is one of the most complex and includes more separate functions.

Ever since the American Revolution, there has been a continuous and growing requirement for logistical support of the Army. Yesterday's "powder and meager rations" requirements have been replaced by increasingly sophisticated and critical logistical support needs.

Thus far, logisticians have adjusted by adapting their support systems and procedures, but the war of tomorrow will require substantial changes to meet the needs of our fighting forces. The next war will be like none before. The first, and subsequent, battles will require incredible logistic support of the battlefield commander.

History is replete with examples of the critical nature of logistical support. Verdun could not have been held in World War I but for Petain's immediate reorganization of the supply system. Motor transport came into its own through dire necessity when all French railways were closed by enemy fire except one second-rate route. This road, known as the "Sacred Way." was kept in constant repair by a small army of laborers using stone from nearby quarries. Trucks brought troops and ammunition night and day with regular stations set up for unloading of men and materials. Any vehicle unable to maintain the pace was shoved off the road. French motor transport proved superior (although the Germans had an excellent network of railways in their rear areas), allowing Petain to relieve his men more frequently and launch counterattacks with fresh troops against weary Germans who referred to Verdun as the "sausage-grinder.

In World War II, Hitler, like Napoleon, failed in his conquest of the Soviet Union due to inadequate logistics preparation. Hitler had decided to attack the USSR even before the Battle of Britain ended, reasoning that

components.

parts and replacement

probably the most complex and difficult aspect of supply in today's equipment-oriented Army...supply of repair parts is one of the logistician's major concerns, not only as a function of supply but also as one of the controlling factors in his ability to keep equipment operating."

Warehoused repair parts are of no value to the mechanic in the field who needed them yesterday to repair an unserviceable vehicle.

Logisticians and commanders alike must get parts to the mechanic with the least expenditure of time and effort. The problem is often compounded by the fact that units and organizations have limited storage capabilities, limited numbers of supply personnel, a limited ability to perform supply administration and the ever increasing requirement for mobility.

As a result of today's fiscal constraints, logistic improvement programs are emphasizing materiel readiness with reduced numbers of line items on repair parts prescribed load lists (PLL) and authorized stockage lists (ASL). This requires the commander to have an even greater appreciation of repair parts operations within his organization.

Even though repair parts are dropped from stock record accounts when issued, this does not relieve the organizational commander of the responsibility of exercising adequate care and surveillance of these supplies. With a well-managed PLL and responsive direct support unit operations, a commander should be able to achieve and maintain a high level of materiel readiness.

Accurate document registers and repair parts records, manual or automated, are essential to efficient repair parts management. Those units or organizations not receiving automated repair parts management support must maintain their PLL manually. Those receiving automated support, however, should prepare to operate manually if that support is not available for an extended period of time. Sound management of repair parts improves materiel readiness

through the reduction of equipment downtime caused by lack of repair parts. This understanding is the key to sound supply management. For more detailed information the following references are helpful:

AR 710-2, Materiel Management for Using Units, Support Units, and Installations, August 1971, with Change 5. This publication prescribes basic repair parts management policies and procedures.

TC 38-2-1, Class IX (Repair Parts) Supply System (Using Unit Procedures), March 1971, with Change 9. This circular prescribes basic repair parts policies and procedures under the automated system.

Equipment Technical Manuals (TM's)

FM 10-14. Unit and Organization Supply (Manual Procedures), December 1973, with Change 1. This is an excellent reference on repair parts management at the unit and organization level.

Supply and maintenance functions must be considered jointly because of their interdependence. Success on tomorrow's battlefield will depend on maintenance needed to keep equipment and materiel in an effective operating condition.

A sound organizational maintenance program can reduce requirements for time-consuming and expensive repair and services at higher categories of maintenance. The purpose of the Army maintenance system is to meet combat readiness requirements with minimal time loss due to avoidable repair work. Maintenance functions range from single-unit preventative services to major depot repair and rebuild services.

Commanders realize maintenance is one thing their people would rather not do. Proper emphasis must be placed on it or other duties will take priority and Army readiness will suffer.

There are some basic aspects of maintenance management that must be considered. One cannot talk about maintenance without including preventive maintenance (PM). Over 19 years ago, Major General I.D. White, Commanding General, TAC, Fort Knox, stated in an address to commanders.

"PM is not a modern invention. Commanders have always been charged with insuring that all elements of their command. human and materiel, be ready and able to accomplish an assigned task. This can be done in only one way-by everlasting interest of every member of the chain of command-in short, by recognizing that maintenance is not the job of the technician, important as he may be, but the job of the commander. PM is a command responsibility.

There is no rigid requirement for establishing a PM program. The program should be as flexible as the situation requires; there will be constant changes and varying factors. It is the commander's responsibility to state the mission and assign personnel accordingly. Command emphasis and personnel are keys to success.

A specific individual, usually the operator, is assigned the responsibility of performing PM on his equipment. Personnel must be properly trained and utilized. Skills at the organizational level must be broad in scope to insure the capability to identify problems and isolate and diagnose failures and their causes

Adequate time during duty hours must be provided to perform required preventive and corrective maintenance. Sound, workable standing operating procedures are absolutely essential to the success of logistic procedures. Adequate facilities in which to work are important for effective maintenance

Although maintenance is often a dirty business, the work environment should be reasonably comfortable. Repair parts, tools, and equipment must be adeguate and available for the job. Missing and defective tools are often the cause of ineffective or insufficient PM.

Publications, especially technical ones, are necessary; they must be up-to-date and their use stressed. "A good maintenance program means simply this: Doing what the book says when the book says to do it."6 Maintenance records and reports are needed for information and management purposes. The action taken is intended to benefit each equipment user and the entire

PM program. Continuous observation of the PM program is required. It is every soldier's responsibility to constantly be on the lookout for practices and procedures that aid or hinder the program. In the final analysis, an effective preventive maintenance program depends on these key words: inspect, detect, correct and follow-up.

An effective and efficient unit require a disciplined administration of the maintenance and supply procedures. Properly trained personnel placed in the required positions are vital. An integral and equally important part is command emphasis. An informed commander will develop a system which indicates in real-time the combat power or logistical status of his organization so he can most effectively manage the resources he will need in battle.

In today's changing Army, logistics plays an increasingly important role. The emphasis on logistics functions is stressed at all command levels. This was evidenced in 1976 when the Chief of Staff of the Army appointed a special task force to investigate property accountability. One critical finding was an ignorance of logistics functions by company grade officers in line and support units. As a

result, all Army service schools have added or increased instruction in logistics.

The New York Times exposed the poor logistics with the headline, "Army Equipment Losses Are Put at \$118.5 Million." It stated the loss was in clothing and equipment, LTG Marvin Fuller, Inspector General at the time, said the main problem was "sloppy inventory procedures...About 65 percent of the unaccounted-for gear included tools, various kinds of parts and such clothing as field jackets." Crackdowns at all levels justifiably jeopardized many careers. On the battlefield, sloppy procedures would have cost lives.

Ignorance and poor practices are no excuse. With the US Congress carefully scrutinizing the Army's annual budget, every soldier must conserve in every area. With good maintenance and supply systems, this can be accomplished. It must be accomplished because only with an efficient logistics system can the Army be effective, and victorious, on the battlefield.

Footnotes

 Colonel Glenn R. Johnson (USA Ret.) and Colonel Fred M. Walker (USA Ret.), The Army Staff Officer's Guide (Houston: Gulf Publishing Company, 1975), p. 49-50. Major General Erwin M. Graham, Jr., "The Dynamism of Army Combat Logistics," *Military Review*, April 1976, p. 65.

 Richard E. Nelson, "Perceptions of Army Logisticians," Army Logistician, March-April 1977, p. 10.

4. Johnson and Walker, p. 52.

 "Maintenance Management for Commanders," Logistics for Commanders, 1977-1978, p. 20-2.

6. Logistics, p. 15.2.

7. "Army Equipment Losses Are Put at \$118.5 Million," The New York Times, 12 October 1977, p. 16.

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Editor,

LTC Gordon's article "Soldier or Linguist" (MI Magazine, April-June 1979) correctly describes the current situation concerning MOS 98G (also 98C and 05H). His point that retention problems will continue is well-taken. I am currently a member of a Reserve ASA brigade support unit where the problems are somewhat different.

I believe LTC Gordon is correct in saying that there must be some attempt to assimilate the linguist into the tactical environment. I feel, however, that he underestimated the importance of strategic training. I have worked in both strategic and tactical level assignments and I believe that I could not have been an effective tactical 98G without the experience I gained on a strategic level. There is also

the question of those 98Gs who may have been initially assigned to tactical units. If assigned to a field station at a later date, they must be virtually retrained.

Maintenance is indeed a major concern but from my experience as a member of the 335 ASA Co, 9th ID, operator maintenance was not the primary problem. As LTC Gordon points out, the Army insists upon using equipment that in most cases will not survive a tactical environment or, for that matter, a drive around the motor pool. There is also the question of objectives. While I was a member of the 335th, there were no clear training objectives: a great part of our time was spent sitting in the office drinking coffee. Most of us felt we were wasting our time and morale was very low. Many

of the problems were caused by a lack of leadership from the company command and a lack of direction from the G2. Needless to say, the reenlistment rate was zero.

I am encouraged that someone is attempting to rectify the linguist situation. It is difficult to be optimistic, however, especially when the question of money and budgeting arises. I cannot foresee the Army doing much to improve retention rates. No reenlistment bonus, rank difficult to obtain, and no real direction for individuals to channel their talents. I am afraid the situation will become much worse before it improves.

Morris G. Bacon 341 ASA Bde Spt Co. Seattle, WA

Israeli Use of Early Warning Indicators

Preceding the 1973 Arab - Israeli War

by MAJ Robert Anderson

Introduction

Our job, as intelligence professionals, is to keep the commander forewarned and thus forearmed. We need not be prophets, but must become knowledgeable of indicators that have historically preceded hostilities between nations. It is therefore axiomatic that intelligence personnel who must be concerned with the future must also be students of the past.

The purpose of this article is to identify the early warning indicators of hostilities (EWIOH) available to the Israeli government prior to the 1973 Arablsraeli War. I will appraise their strategic importance and assess the Israeli use of such indiciators, concluding with the consequences of Israeli use or misuse of such EWIOH.

Uses of EWIOH

EWIOH are of critical importance to national leaders and military commanders. In The Fourth Dimension of Warfare, Donald McLachlan says the principal types and uses of intelligence are two-fold: 1) offensive, to gain surprise; and 2) defensive, to thwart surprise.²

Israel must rely heavily upon her intelligence services to reduce the potential of being surprised by an outbreak of hostilities initiated by her neighbors. Her ability to survive an attack by Arab nations is directly related to the state of her military preparedness which, in turn, depends upon timely forewarning of her divisions.³

Placing an army on alert and mobilizing reserves are two of many possible end uses for EWIOH. The strategic intelligence that serves as the basis for such national level actions "Forewarned, forearmed; to be prepared is half the victory." Miguel de Cervantes¹

can also assist in the decisionmaking process preceding such actions.

The Responsibility Of Intelligence

Intelligence services universally collect and analyze information and disseminate intelligence—the product of their efforts.

By US Army doctrine, successful collection at the strategic level, especially regarding EWIOH, is vitally dependent upon collection planning and management.

Directing the analysis of information is a second basic function in the intelligence cycle. FM 30-5 defines analysis as "the sifting and sorting of evaluated information to isolate significant elements with respect to the mission and operation of the command."

The extent of analysis can vary widely depending upon the amount of time available. Once the information has been evaluated for pertinence, source and agency, reliability and accuracy, it is analyzed. Upon completion of the analysis, the final phase is the intelligence cycle, the dissemination of intelligence, is undertaken.

EWIOH in the Middle East

It is virtually impossible to conduct or prepare for military operations without being detected and preparations made by Egypt and Syria prior to their attack on Israel were no exception to this.

 Concentration of Troops and Equipment In an article entitled "Arab-Israeli Conflict Four: A Preliminary Assessment," (Naval War College Review, January-February 1974) Commander Samuel W. Sax, USNR, and Professor Avigdor Levy state that Israel's intelligence organizations were well aware of the concentration of troops and equipment in what could only be termed a military build-up. Such activity "could not have escaped aerial reconnaissance and other means of detection."

Israeli military intelligence was aware that Egyptian troop strength along the Suez Canal was increasing and that within hours of the attack, Syrian troops had moved ten miles forward from their "secondary line to the 1967 Golan Heights ceasefire line." Equipment movements included repositioning of combat aircraft in forward areas.

Armed Forces Journal International indicates that Lockheed's high altitude Mach 2.5 SR-71 reconnaissance aircraft were "probably" used to photograph defensive positions constructed by the Egyptians. Although the dates of such overflights are not clear, the photographs were undoubtedly passed by US Intelligence to Israel.7 Time reported, without qualification, that American spy satellites were used to gather photographs of the Arab build-up.8 While hostile troop concentrations along an international border can serve as an indicator of potential crisis, it must be noted that similar concentrations occurring earlier in 1973 had dissolved without incident.9

Removal of Non-Combatants From a Potential War Zone

Acts not hostile in themselves can well serve as EWIOH as in the case of selected movements of non-combatants from a potenSeveral days before large-scale Egyptian troop deployments, a "massive exodus of Russian dependents" became apparent.¹⁰ Fair numbers of Soviet military advisors, pilots and technicians remained.¹¹

Provocative Speeches by Government Officials

Two weeks prior to the start of the war, Egyptian President Sadat hosted a meeting with two leaders of the Palestinian guerrilla movement. He was reputed to have said, "Prepare yourselves. We are going to war." 12

In presenting a war budget to the Parliament, the Egyptian Premier said that roads to a peaceful solution of the Arab-Israeli conflict were completely blocked.¹³

Preparation of Attack Routes

Five days before fighting erupted, Israeli garrisons along the east bank of the Suez Canal in the Bar Lev forts reported that, on the Egyptian side of the canal, Egyptian soldiers were seen taking measurements at the water's edge and driving in markers. Bulldozers were observed carving gaps in sand dunes. This was followed days later by the appearance of bridging material. No such activities had ever occurred prior to Egyptian military maneuvers.¹⁴

Increased Materiel Shipments to Belligerent Nations

Soviet freighters, with holds full of arms, were steaming to Arab ports prior to the attack.¹⁵ Cargo ships full of equipment began arriving in Syria "almost from the beginning of the war."¹⁶

Additionally, rail shipments of essential supplies from Warsaw Pact Forces to Hungary had been noted. Israel knew the significance of this indicator—Hungary is the strategic stockpile point for Soviet airlifts into the Middle East. 17

UN Observer Movements

On October 16, all UN observers along the Suez Canal were ordered back to Cairo. 18

Evacuation of Defense Military Headquarters

On the night of October 5, 1973, Syria's Defense Ministry evacuated its Damascus Headquarters. 19 Undoubtedly, Israeli Intelligence must keep track of the geographical location of enemy defense headquarters. I

could not determine, however, whether information concerning the move from Damascus reached Tel Aviv before war erupted.

Accelerated Launch Rate of "Spy Satellites"

On October 3, 1973, the Soviets launched a Cosmos spy satellite containing 5,000 pounds of photographic equipment. Even before it was retrieved, a second satellite was launched from the same site.20 George Wilson, of the Washington Post, wrote that both satellites could photograph Israeli battlefields although the first was designed to photograph large Mideast areas while the second took clearly-defined photographs of specific locations. Wilson said the satellites were launched "in rapid fire order" on an "emergency schedule."21

• Increased Security of Embas-

Approximately 6 hours before the fighting erupted, "unusual security measures" were put into effect by the Soviets around Arab embassies in Moscow.²²

Military Forces on Alert

Syria's ground and air forces had been in a state of alert since September 13, 1973 when Syrian and Israeli fighters clashed in a large air battle.²³

Acceleration of HUMINT Collection Effort

Increased recruitment and use by Syria of Israeli citizens to collect human intelligence on Israeli defenses served as an indicator of increased hostility of Syria towards Israel.²⁴

Israeli Use of EWIOH

The indicators available to Israeli military intelligence all pointed to a new Arab offensive. Consequently, Egypt and Syria did not achieve strategic surprise. Drew Middleton, military affairs writer for *The New York Times*, wrote that Prime Minister Golda Meir and her cabinet "were certain" by October 5 that offensives were being prepared by the Egyptians and Syrians.²⁵

The Israeli Cabinet considered the available EWIOH and debated the pros and cons of a preemptive strike by the Israeli Air Force. Israel decided not to strike first. Although the political consequences of an Israeli first strike were of paramount importance to the cabinet in its deliberations, Israel knew that

Egyptian and Syrian air defense systems were vastly improved since the 1967 War and that initial aircraft losses to those systems would not be small.

In sharp contrast to the Egyptian failure to achieve strategic surprise, however, were the several instances where tactical surprise was achieved-either because EWIOH were not passed to or were not acted upon by front-line commanders of the Israeli Defense Force. The Israelis were surprised to learn on October 6, 1973 that Egyptian commandoes had destroyed the Israelis' carefully erected fire and chemical barrier whereby the Suez Canal would be set aflame in event of an Egyptian assault.27 Had hostilities been considered imminent, the units responsible for the barrier should have checked it more frequently.

Accurate knowledge of the morale, competence and fighting spirit of the Egyptian and Syrian assault troops would have been of great importance to Israel. While Israeli Intelligence had supplied precise intelligence concerning Soviet weapon flows to Arab states, accurate assesments of Egyptian and Syrian fighting men were lacking.

Prior to hostilities, Israeli mobilization was negligible. The use of EWIOH to forewarn and mobilize was not elected and the armed forces were left on their own while the cabinet went on alert on October 4 and asked Western leaders to help stop the impending hostilities.

Syria achieved a measure of tactical surprise against Israel, deploying nearly 2,000 T-62 tanks (against 90 Israeli tanks) covered by an anti-aircraft system of missiles and light guns. The movement from defensive to offensive formations on the night of October 5 went undetected by Israeli observation posts on Mount Hermon.²⁸ Here was an instance where no EWIOH (not its non-use) permitted surprise by the Syrians.

The Israeli Defense Force was aware that SA-6 missiles had been introduced into Egypt. But before the war began, Israel had not bothered to install adequate electronic countermeasures on her principal ground attack aircraft—the Skyhawk. Consequently, Skyhawks could neither

Israeli Chief of Staff, General Elazar, stated that he received a warning at 0400 hours, October 6, that an attack would commence at 1800 hours: the Israeli mobilization commenced at 1000 hours and the Egyptian attack at 1400 hours. In an interview with a special committee of the US House Armed Services Committee, Golda Meir said the decision not to preempt was made "so the world would know that the Arabs attacked this time." 30

Several days previous to the Arab invasion, Israeli agents alerted the Israeli government about the troop build-ups in Egypt and Syria. Yet Israeli Intelligence "obviously failed for weeks to evaluate properly the information that it had gathered." Military intelligence accepted Egyptian statements that troop increases were part of annual maneuvers. 32

Conclusions

Because Israeli Intelligence had provided the government with available EWIOH, Israeli was not strategically surprised by the Arab attack on October 6, 1973. Israel was, however, caught by a number of "shattering surprises" at the tactical level.³³

The war proved extremely costly. Israel's 2,400 men lost in combat would have correlated to 170,000 dead in a force as large as the American armed forces. ³⁴ Greater forewarning of front line commanders by the Israeli government would have allowed more effective Israeli preparations for war and would certainly have saved many lives by eliminating (or lessening the consequences of) those tactical surprises achieved by Egypt and Syria.

Forewarned? Forearmed? It is our job as intelligence professionals to see that the commanders we support at tactical or strategic levels always are.

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(Continued from Page 15)

as widely as this magazine. I'd be interested in knowing how many military intelligence officers, NCOs and soldiers subscribe...MI Magazine should be required reading of everyone in the branch.

Include more articles geared to lower enlisted and junior NCO personnel of all intelligence specialties.

An article should consider retention problems of people in the MI MOSs. I have noticed that the Army is having a hard time keeping people in the 97B MOS and they have had only limited

success in recruiting new 97Bs.

Where were the *Enlisted Notes* in the April-June 1979 issue?

Some more input on the Marine/Army liaison.

Include some "aircraft recognition" articles from time to time.

(Continued on Page 29)

The Warsaw Pact — A Soviet Dilemma

by CPT Robby A. Noone

The Soviet Union has a large, well-oiled military machine massed in East Europe, poised to quickly attack potential adversaries. What role do the so-called Warsaw Pact Allies (East Germany, Czechoslovakia, Poland, Hungary, Romania and Bulgaria) play as part of this awesome armed force?

Historically, the military security system that the Soviet Union has erected in Eastern Europe has always rested primarily on a substantial forward deployment of Soviet forces in the area, reinforceable from the USSR, and only secondarily on the collective defense contributions of the other Warsaw Pact members.

But the Kremlin is being forced to reevaluate her European strategy since the military equation is shifting due to the declining Soviet population, increased friction with Communist China and the strengthening of NATO. Recognizing this change in the military balance of power, the Soviets will find it increasingly necessary to incorporate the military arsenals of the other Warsaw Pact members. The addition of East European armed forces offensively to the Russian inventory would insure Soviet commanders the continued superior force ratios required for their blitzkrieg operations against enemy armies.

One question still haunts Soviet leaders inside the Kremlin: How reliable are the peoples and military units of the East European nations? This is a Soviet dilemma. The USSR must employ non-Soviet forces to insure a continued military advantage but these potentially unreliable allied forces risk military disaster.

This problem has proven extremely complex for the Soviet hierarchy. It is not easy to accu-

rately judge the political loyalty of the satellite countries or predict how nationalistic attitudes would change in the event of war. It is equally difficult for Soviet military strategists to determine the options available for using allied units in offensive but non-critical missions. Free World analysts find the Soviet solution to the dilemma even more difficult to decipher because of the conspicuous absence of references in Western military writings concerning the employment of non-Soviet forces. There has been very little open discussion in Soviet publications of this issue.

Combining principles of Soviet military doctrine with current military disposition and composition of the Warsaw Pact and the current state of East European political affairs, some logical means for resolving the dilemma become apparent.

Guns-at-their-back option

The guns-at-their-back option would appear to solve the Soviet's problem quite simply. The USSR could merely allow the East European allies the honor of leading the attack, thereby achieving maximum use of these forces and eliminating the loyalty issue as non-Soviet troops become bullet absorbers.

Unfortunately, this alternative quickly loses its appeal when the idea of thousands of Warsaw Pact tanks crossing the border, turning their turrets around and joining forces with the enemy is considered. Satellite countries now supportive of the Soviet Union might quickly change their stance when realizing native sons are to become cannon fodder.

Tactically, Soviet commanders, wishing to achieve lightning penetrations deep into enemy territory, would logically want to use Soviet troops who have been highly trained for such operations. Should non-Soviet forces stall due to problems like command, control, language and

lack of training, or to delay the advance, second echelon units would stack up in the rear, the entire timetable would be upset. The resulting loss of speed and surprise in the opening hours of a war could be disastrous. The initial thrust against the enemy would be considered a critical mission, too crucial to be entrusted to non-Soviet units.²

Home Defense Force

Again the solution to the dilemma appears simple. Leave potentially unreliable allies at home where they cannot disrupt the battlefield. Also, in the unlikely event the enemy proved victorious and forced Soviet troops eastward, full strength allied forces waiting in defensive belts would act as a buffer between invasion forces and the steppes of Russia.

This is no longer feasible because like it or not, the Soviets need their Warsaw Pact comrades offensively. Non-Soviet countries contribute fifty-seven divisions, (approximately 50 percent) of the total Warsaw Pact conventional ground force structure in Europe outside the borders of the USSR.³

Moscow is giving serious consideration to increasing the military role of her allies in the Kremlin's European Strategy; this interpretation is based on such significant indicators as the upgrading of the armed forces of satellite countries with a largescale influx of Soviet military hardware. The Soviet Military High Command emphasizes weapons standardization and expanded, increased, joint training exercises among the members of the Warsaw Pact. In recent months, Soviet leaders have demanded that their European wards substantially increase the military portion of their national budgets.4 It seems highly unlikely that this would take place if Warsaw Pact members were to continue a purely defensive military posture and mission.

"Since the invasion of Czechoslovakia (and also by absorption of the lessons of the 1973 Middle East war), the whole tactical outlook of the Warsaw Pact has been given a face-lift, not to mention the whole steady shift in the basic function of the Pact, which can no longer be regarded simply as a defensive military mechanism." 5

No military commander would want a large and potentially troublesome military force in his rear areas. How loyal would non-Soviet forces be if left behind in their own countries without Soviet occupation forces "guarding" them? Using Soviet troops from battle areas to keep an eye on satellite countries could seriously affect Soviet military capabilities. Rebellious Warsaw Pact forces, (sounds like Star Wars!) could disrupt Soviet strategic second units and prevent them from reinforcing front line troops.

Integrated Allied Army

The unified force option would form all non-Soviet divisions into one Warsaw Pact army assigned to a Soviet front. The front commander would provide an attack axis, surround the Warsaw Pact Army on three sides with Soviet armies and achieve greater concentrations of Soviet forces along the remainder of the front. The allied army could be given a non-crucial portion of the attack frontage and, by tying down enemy forces, allow Soviet armies better force ratios. But again problems arise.

Language and command and control problems would be formidable, and the assembling of this allied army from all over East Europe prior to a major offensive would negate one of the Soviet Union's most coveted military principles—surprise. It is also apparent that the current Warsaw Pact Headquarters could not support a combined allied

army.

Non-Soviet Warsaw Pact members strongly object to the formation of a combined army. The formation of a combined standing army for the Warsaw Pact has been tried at least twice without success—1956-57 and again 1967-68.6 When the Soviet Union again proposed an integrated force recently, East European countries, led by Romania, rejected the offer.

There are two reasons for their objections: the likelihood that the Soviet Union will try to dominate the army, by placing the allied army under the leadership of Soviet generals; and the fear of being drawn into non-European Soviet conflicts, particularly in the Far East. Due to the many disadvantages of this option, its implementation is highly unlikely.⁷

Disband the Warsaw Pact

Eliminate the Warsaw Pact and the Soviets would have eliminated the potential threat:

"By its existence in peacetime, the Warsaw Pact is designed to serve primarily Soviet military interests and certain political ends. Ironically enough, its disappearance in wartime would mean that it still served those prime Soviet interests and objectives."

Other treaties between the Soviet Union and her satellite countries could be exercised to continue selected military options while unreliable allies

are disarmed.

Yet, these same actions could be accomplished through the Pact with better results as in Pact support of the Soviet invasion of Czechoslovakia in 1968.9 Eliminating the Pact, which Russia completely dominates would be illogical. Continuing to build up Pact armies with modern equipment and then disbanding these forces is likewise counterproductive.

Disbanding the Warsaw Pact would not eliminate any disloyal East European faction and might actually force an armed confrontation. Therefore, implementation of this alternative would be illadvised. ¹⁰

Piecemeal Employment of Allied Forces

The premise behind this approach is to take all non-Soviet forces and apportion to them necessary but non-critical missions. This proposal immediately presents some significant advantages. Since allied forces are treated independently, the Soviets could categorize each allied armed force, (down to division level) based on loyalty as perceived by the Kremlin. The

more trusted units would be given the more important military missions, allowing Moscow great flexibility when reacting to a particular military situation. The unique military requirements presented by a particular military situation can be analyzed, and, as circumstances dictate, non-Soviet forces could be employed in various ways.

Strategic Example

Should the Soviet Union decide war with NATO is inevitable and choose to seize the initiative by attacking first, the Kremlin's crucial strategic area would be Central Europe along the border of West Germany. Non-Soviet forces could be kept from this critical front and sent on supporting attacks in the Baltic and Balkan areas, keeping NATO forces in these areas tied down and thus unable to reinforce West Germany. One particularly trustworthy ally could remain behind to insure internal security throughout Eastern Europe. Neutral countries of strategic value could be conquered by selected allied units. Disillusioned satellite nations could be disarmed, their military equipment distributed to Soviet and other Warsaw Pact reserves as they mobilize. Loyal allied units along the West German border could be given to the Soviet front commander for tactical employment.

Tactical Example

While preparing for a major offensive, the Soviet front commander places some of these units in front of his Soviet forces to confuse the enemy. As the attack begins, the Soviet commander sends allied divisions down secondary avenues of approach, disguising the location of the main thrust. The allied supporting attacks also engage enemy units, preventing them from reinforcing the main battle area, thereby giving the Soviet commander more favorable force ratios and increasing his chance for victory. Once enemy defenses have been breached and Soviet units start to exploit this opportunity, allied units could provide second echelon forces for mopping up bypassed enemy units or conducting high casualty operations in built-up areas. Special units within allied divisions could provide reconSummary

The Soviets need the military forces of the other Warsaw Pact members to maintain military superiority in Europe. Yet allied divisions are unreliable. How can these forces be employed to Soviet advantage without Moscow risking military disaster? The most acceptable option seems to be the piecemeal employment of non-Soviet military assets. Assignments would depend on Soviet perceptions of each allied unit's loyalty, an intangible influenced by politics and economics. Eastern European countries' support of Moscow might well change in a wartime environment. Soviet leaders must also consider what concessions allies may demand in exchange for their support.

With so many variables involved, the decision to employ non-Soviet forces would best be made just prior to the commencement of hostilities when changing influences could be better analyzed. No matter what missions are assigned allied units, indications are that non-Soviet forces are being integrated into Soviet offensive strategy.

The potential for seeing East European divisions alongside Soviet forces in the attack is increasing. Where and how these non-Soviet forces are deployed is a problem Moscow must solve, but if the Kremlin is successful, the West will be presented with an even worse dilemma, a significant improvement in the military posture of an already dangerous foe.

Footnotes

1. Thomas W. Wolfe, "Role of the Warsaw Pact in Soviet Policy," Paper 4973, The Rand Corporation, March 1973, p.5.

2. Although the guns at the back alternative is often mentioned as the perfect solution, no evidence supporting this option was found probably since the alternative is in contradiction to basic Soviet military doctrine. For a thorough understanding of Soviet offensive tactic see A.A. Sidorenko, The Offensive (A Soviet View), (Moscow: 1970), translated and published under the auspices of the U.S. Air Force.

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7. This issue was again raised in the Warsaw Pact summit meeting in November 1978, see "Worldgram," p.31, is discussed by MacKintosh, p.1125, and is mentioned by Wiener and Lewis, p.16.

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(Continued on Page 42)

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NOTES



Brigadier General James A. Teal, Jr., assumes command of the US Army Intelligence Center and School. From left to right, General Teal, Command Sergeant Major Hipsley, Lieutenant General John R. Thurman, III, and Brigadier General Albert N. Stubblebine III.



2LT Pamela D. Jackson and 2LT Howard C. Jackson.

Family Traditions

Howard and I were married in November, 1973 in Marietta, Georgia. We moved to Tallahassee, Florida to begin college in 1975. At Florida State University, we majored in international affairs with specialties in the Soviet Union and Eastern Europe.

In 1977, we began considering the various alternatives available to us as students of international affairs. We found that a career in the military would have direct relevance to our background and interests. Howard had been a Warrant Officer (helicopter pilot) in Vietnam and, with his previous military experience, we decided to join Army ROTC at FSU.

Having completed our degree and ROTC requirements, we were commissioned MI (our first choices) on 16 March, 1979. We will attend the 35A Tactical Intelligence Officer Course and have orders for Germany.

Our long range goals include the Foreign Area Officer specialty but, in the short run, I am applying for flight school and Howard plans to go through the "refresher" program at Fort Rucker or to be assigned to a flight unit. In four years, we hope to return to school to work toward Masters degrees in International Affairs and I plan on using the Army Fellowship awarded me by the Department of the Army at that time.

2LT Pamela D. Jackson 2LT Howard C. Jackson Co G., USAICS



DSIASUUSAISD

NOTES



CW3 Bob Kennard and MSG Bill Kennard.

On June 1, 1979, identical twin brothers assigned to the US Army Intelligence School, Fort Devens (USAISD) were promoted together, one to Chief Warrant Officer 3, the other to Master Sergeant.

CW3 Bob Kennard is assigned to USAISD as Projects Officer, Training Analysis Branch, Directorate of Training Devlopments.

MSG Bill Kennard is assigned to USAISD as NCOIC, Maintenance Branch, Directorate of Support.

Bob and Bill Kennard entered the Army together in November 1961. They spent basic training together at Fort Leonard Wood, MO, just 80 miles from their home town of Versailles, MO. After basic training, they spent the next three years together, making their promotions through Sergeant (E-5) together.

Bob was later appointed as a warrant officer. The brothers were finally separated for a few years, but were reunited in Sinop, Turkey. CW3 Kennard arrived at Sinop in November

1976. MSG Kennard arrived in June 1977. The brothers spent five months together, with Bill working for Bob!

CW3 Kennard was reassigned to Fort Devens in October 1977.

MSG Kennard was reassigned to Fort Devens in June 1978.

The 2LTs Ellis are recent graduates of the USAICS officer basic courses. Richard T. Ellis is a 1979 graduate of the University of Nevada, Reno. He graduated with high distinction and accepted an RA commission. He received dual degrees in criminal justice and political science.

Richard has completed his Tactical Intelligence Officer Course and is currently attending Ranger school.

Tracy Ellis is seventeen months younger than her brother and also graduated from the University of Nevada with high distinction and a degree in criminal justice. She, too, is an RA officer and will complete her 36A Counterintelligence Officer Course in January, 1980.

2LT Ellis and 2LT Ellis will both be going overseas subsequent to their basic and intermediate training.



2LT Richard T. Ellis and 2LT Tracy Ellis.

On Developing the Human Element in Military Intelligence

by LTC STAN LEE T. FULCHER

In the past few years, Military Intelligence has spent considerable effort and resources on the technical and organizational areas of intelligence production. Numerous collection systems have been developed which yield huge bodies of information to meet tactical requirements. Existing systems are constantly being upgraded. Development of the organizational component has continued; the need to integrate data from all resources is well-recognized.

Unfortunately, no corresponding effort has been devoted to the human side of the process. Information from these sophisticated systems must be evaluated and interpreted by the human analysts, who introduce the element of judgment to integrate the information into a usable whole. Historical examples of intelligence failures stem from failures of analysis as often as from lack of information or failures of dissemination.

Intelligence officers are called upon to function as analysts at all tactical and strategic levels. They are thoroughly trained in the technical knowledge they require, and their ability to apply their knowledge as well as judgment is stressed in exercises and simulations. These do not, however, develop the most basic analytical skills of the individual. Formal courses of logic, specifically tailored to intelligence needs, should be developed. Rules of inductive and deductive logic are fundamental to the process of analysis; they govern the validity of inferences which can be soundly derived from available evidence, and the degree to which they can be relied upon.

Improved accuracy would not be the only benefit derived; the clarity of thought allowed by logical training would probably result in more precise and effective communication.

The importance of experience and intuition cannot be denied. However, the value of certain lessons is more quickly and easily recognized and assimilated by one who has previously been trained in a scientific method of analyzing and evaluating his experiences. The scientific method does not exclude intuition but rather enhances it, for intuition is nothing more than the unconscious application of lessons previously learned. The process of thinking clearly can be taught; like any other skill, it is sharpened by basic exercises and continued training.

Logic training would be challenging to both instructor and student. It cannot be taught by multi-media presentation or learned by rote, but would require serious study and intensive interaction with the instructor. A very low student/teacher ratio is not necessary - universities often teach logic in groups of a hundred or more - but grading papers and offering assistance to individual students would best be achieved by highly qualified assistants.

The rather intensive effort involved would have a beneficial effect on Basic Officer Course students in particular. Most of these students come from a university environment. They are likely to become disenchanted with their training if it lacks challenge, as does much of the basic course training.

The program should be designed by a team of logicians and intelligence officers. Much of the necessary expertise can be drawn from within USAICS. Volunteers would be easy to obtain for such an important and prestigious project. Many officers have had legal training which is grounded in formal and informal logic. The degree of in-

house expertise available would dictate the degree of civilian participation, which would be somewhat more expensive than using available personnel. The Directorate of Training, Directorate of Evaluation and Directorate of Training Development, at least, should have a voice in the development of the program.

The development phase should determine the level of expertise necessary for instructors at various levels. Many universities now offer courses which are "team-taught" by doctors of two or more disciplines. As few as two individuals, one with a PhD and expertise in logic and one highly regarded senior instructor from USAICS, may be able to work out a satisfactory pilot project.

The availability of funds is a critical concern which would necessarily limit both the development and the implementation of the project. First-year PhD's usually work for \$11,000 to \$14,000 in the academic world. The benefit package of government service, the prestige and mystique that still clings to Military Intelligence and the chance to work with extremely motivated students may induce such graduates to accept somewhat lower salaries. Masters candidates and doctoral candidates usually serve as assistant instructors in the academic world for low stipends. If a prestigious logician could be persuaded to associate himself with USAICS, his name would draw promising students to assist in the project. The University of Arizona is situated close enough to Fort Huachuca for faculty members to commute on at least a once-a-week basis. Graduate students usually have flexible schedules and could reside nearby so as to be accessible more often.

The supply of qualified

Further possibilities lie ahead. A high standard of morality is an integral part of our officer corps. Classes in ethics would be a valuable supplement to instruction on the Geneva Convention, the UCMJ and other

subjects.

The project deserves consideration by USAICS. At the very least, the student would be better able to think clearly and simply in an analytical capacity and to communicate effectively; he would be better able to perform his mission. The cost is

a matter of discussion. Initially, the expense of a few blocks of insruction in formal and informal logic, specifically tailored to Intelligence purposes, could be very low, especially in comparison with the cost of developing and procuring sophisticated electronic systems. The potential improvement in the human component of the military intelligence system, however, is very great indeed.

Hitler's Spies, German Military Intelligence in World War II, by David Kahn, Mac-Millan Publishing Co., Inc., New York, 671 pages, \$16.95.

Kahn is known for an earlier best-seller, The Code Breakers. Hitler's Spies grew from a professional interest in intelligence activities and his fascination with the German Army.

The first twenty chapters of this well-researched book deal with the collectors of intelligence. After covering the spies, Kahn goes on to discuss the evaluators of intelligence such as the military economists, the Luftwaffe and Kriegsarine and the Foreign Armies East and West.

After his study of the German intelligence network, Kahn considers three intelligence case histories: The Greatest Mistake (German invasion of Russia); The Biggest Surprise (allied invasion of North Africa); and The Ultimate Failure (allied invasion of Normandy).

Hitler's Spies exposes some key prejudices shared by members of the German officer corps and attributed to their economic class, the loss of the First World War and a fear and hatred of Soviet Communism. The methods by which Hitler chose to run Germany also served to cause an organizational fragmentation of his intelligence resources.

Germany had many spectacular military successes which will be studied by students of military history for years to come but Germany also blundered miserably as shown in the case histories. Kahn's fascination with the German Army has produced a well-written and interesting book that presents a comprehensive view of a very important

facet of World War II.

MAJ John M. Rooney Resource Analyst, USAICS

Armed Progressive; General Leonard Wood by Jack C. Lane, Presidio Press, San Rafael, CA, 1978, \$16.95

Leonard Wood, a graduate of Harvard Medical School, had a military career that took him from the pursuit of Geronimo in the deserts of the Southwest to the position of Chief of Staff of the US Army in the critical years prior to World War I, and almost to the Presidency of the United States. Renowned for his administrative ability, Wood championed the cause of military preparedness in the face of widespread American pacifism. Characteristically blunt, Wood stated: "A government is the murderer of its people which sends them to the field uninformed and untaught."

In two important ways Leonard Wood was a pivotal figure in American military history. He became Chief of Staff just as the General Staff reform of 1903 was languishing. His reforms and victory in the struggle for supremacy of the Chief of Staff over the War Department bureaus may well have saved the General Staff system for the role it would play in directing two World Wars. Secondly, Wood saved the military establishment from suffocating in "Uptonian Pessimism."

Influenced by the writings of General Emory Upton, most regular army officers had come to distrust America's citizensoldier tradition and yet were convinced that the nation would not support a large peacetime

army. Wood rejected this dilemma and, instead, attempted to revive the democratic theory of military service. Like the obligation to pay taxes, Wood argued, military obligations must be spread equally among all citizens. The success of his efforts can be measured by the nation's peaceful acquiescence to military conscription during World War I and by the fact that it successfully fought the war as Wood had said it would: with a speedily trained citizen army.

Wood was major figure in American history, but because of a serious flaw in his personality he fell short of greatness. Selfrighteousness in high military officers can be a serious matter; in the case of Leonard Wood, it drove him beyond the bounds of military propriety and standards of behavior required by a democratic society from its officers. The reader will discover that at least one high-ranking officer did admire and did dedicate himself to emulating Leonard Wood. That was Douglas MacArthur.

The author makes a critical study of Leonard Wood's quest for power and of his tremendous achievements. To understand this pivotal figure who played such a dominant role at the turn of the century, one must also know the age of which he was a part. The author provides this insight while capturing the essence of this capable, ambitious, proud, bigoted, selfrighteous man.

I recommend this book to the serious student of military history. It is well worth the time and effort. Ah, well! Read the book and decide for yourself.

MAJ Reginald H. Turner DTD, USAICS

National Training Center Phase I Live Fire Test

by Geary W. Sikich

Phase I testing for the National Training Center (NTC) live fire concept ended at Fort Hood, Texas, on 28 January. During the preceding 3 1/2-months, extensive individual and group efforts went into the design, layout, training and physical setup of the range.

Over 200 Saab systems were ordered and used for the test. The Saab system is an electronically operated mechanism which will rise and fall on electronic command and also provides hit and fire indications through the use of impulses sent via a transmitter with a total selection of five channels. Each channel (A, B, C, D and E) can control eight different receivers for a total of 40 receivers per transmitter.

During the pilot test phase at West Fort Hood (October-November 1978), approximately 20 controllers were trained to operate the target array: ten operated the transmitters and ten provided for the attrition of targets so that the target array appeared to be actually losing vehicles when a target was hit. After a detailed briefing to MG Todd of the TRADOC Combined Arms Test Activity (TCATA), the pilot test began on 7 December 1978. Targets representing a motorized rifle battalion (MRB) in company columns appeared in the mist and haze at 4,000 meters. Within minutes, the MRB was moving to platoon columns at 3,000 meters.

At 2,000 meters, the array showed 12 T-62 tanks leading and 39 BMPs, approximately 100 meters behind, advancing into the battle formation. Targets also

appeared at ranges of 1,800, 1,400, 1,000, and 500 meters.

Upon completion of the pilot test, we were ordered to move to Blackwell Mountain Range on the main post. Here, the entire target array (195 targets), was moved from West Fort Hood to Blackwell, assembled, and quickly put on the ground in large holes dug by engineer support equipment within five working days. This was an impressive accomplishment for the test personnel because each target had to be reassembled, and to also have the wooden panel, hit detector firing simulators, and hit simulators placed and tested. Work continued at an accelerated pace throughout December. Weather posed a major problem as several cold, freezing rains filled many of the target holes during the preparation stage. Mud was everyone's enemy. The 1/4-ton and 2 1/2ton trucks were frequently stuck in the mud. The work effort, now a 7-day-a-week job, continued without letup. The evaluation teams for the armor and infantry units came on board during December and also learned the data collection system. By 3 January 1979, all was in order for the first of six repeat exercises of heavy tank company teams required to defend against an attack by a motorized rifle

On 12 January, a company team of two armor platoons and one infantry platoon of the 4th Brigade, 2d Armored Division, were poised for the attack. Four hours prior to H-hour, intelligence messages began to filter in.

Test personnel were assigned to act as the brigade headquarters while the participating battalion Tactical Operations Center (TOC) got a work out conducting the message traffic and preoperations briefings. At H-10 minutes, artillery in the form of simulators, smoke and air burst simulators began to fall on the company positions. Hasty orders were then given to button up and infantry troops positioned themselves behind 50 caliber machineguns in their preprepared positions. All the troops agreed afterwards that the initial artillery simulations were very realistic and came as a complete shock. At H-hour, targets began to appear at 4,000 meters; however, limited visibility caused problems. At 2,000 meters, rounds began to go downrange as the order-to-fire was given. Twenty minutes later, after about a 100 plus rounds of fire, the order to cease fire was given. The attack had ended. Five more iterations followed; all received similar, full-fire treatment. All the company commanders and troops were enthusiastic about their efforts and wanted to fire the range again.

Immediately following each firing, a post-action briefing was given. This briefing provided the basis for the full critique which followed the next day. All the data, audio-visual and other material was processed and refined following each iteration, and then presented to the firing unit the following morning. The critiques lasted for one to two hours.

As part of the critique, a questionnaire was filled out. The company commander and his ception of the battle and his battalion's mission. Emphasis was placed upon the entire exercise being a learning experience and not a graded test.

After talking to the opposing force commander, the unit was broken into small sections and critiqued at different stations

with instructors rotating from station to station until all critiques were finished.

This concluded Phase I of NTC. Planners are now looking toward Fort Irwin, California, and phase IA scheduled for early 1980.

31 January 1979

Often in our day to day reading, we come across articles or books that would be of interest to others in the intelligence field. Too often, such sources go unrecognized by all but a few readers. The purpose of this addition to our Professional Reader department is to provide our readers with a quarterly listing of articles and books of definite interest to the MI professional.

You can support this department in future issues by forwarding (on feedback cards provided in each issue or by writing or calling MI Magazine) information on articles or books you find important to the intelligence community.

I would like to thank 2LT Patrick McNiece, Co. G, USAICS, for compiling this listing of books and magazine articles. Editor

Very Special Intelligence, Patrick Beesly, Doubleday & Co, Garden City, NY, 1978.

Patrick Beesly provides an inside view of the British Naval Operational Intelligence Center (OIC) and its work in WW II (Atlantic). Using recently declassified material, he deals with such topics as the cryptanalysis of Enigma and the German U-Boat codes, the destruction of the "Bismark," and other topics dealing with intelligence in the Atlantic.

Very Special Intelligence is not just a book for the WW II buff. It offers invaluable insights into intelligence concepts. It is certainly worthwhile reading and a worthy addition to the MI professional's library.

"The Drift Toward the Draft," LTC Henry J. Sage (USMC), US Naval Institute Proceedings, June 1979.

LTC Sage provides a good historical overview of the draft. He follows with an evaluation of the US military under the "all volunteer" concept and concludes that a return to the draft may not be too far away. This article does not focus on the Navy, but is directed at the US defense forces as a whole. The Duel of the Giants, Drew Middleton, Charles Scribner's

Sons, NY, 1978. Drew Middleton, the New York Times military correspondent, examines the likelihood of war between the Soviet Union and the People's Republic of China. It is a well known fact that the Soviets have troops stationed in Siberia in numbers that are more than sufficient for defense purposes, and hostility towards Russia is far from unknown in China. In light of these facts, Middleton investigates the ideologies and capabilities of those involved in the strategic triangle of the US, USSR, and PRC.

"The MX and Strategic Deterrence in the 1980's," G.K. Burke, Air-University Review, May-June 1979.

Dr. Burke analyzes the strategic relationship between the US and USSR. He deals with the Soviet civil defense system in depth and the imbalance of strategic and conventional arms. This article offers a very good evaluation of the MX system and US strategic standing.

For the Common Defense, A.J

For the Common Defense, A.J. Goodpaster, Lexington Books, Lexington, MA, 1977.

In this book, General Goodpaster assesses the forces that shape the American defense system. He examines the influence of international events, key personalities, momentum of established programs, and interest groups on defense development. He includes an evaluation of the US policies of defense, deterrence, and detente. For the Common Defense accurately portrays the impact of the USSR, our allies, and the Third World upon US defense policies.

Blue-Collar Soldiers?, Alan N. Sabrosky, Foreign Policy

Research Institute, Praeger, Boulder, Colorado, 1978.

Alan Sabrosky views an issue that may be of importance in the near future-unionization in the US military. His work is a balanced assessment of the constitutionality feasibility, and desirability of military unions in the United States.

Political Prisoners: A World Report, Ed. Lester Sobel, Facts on File, NY, 1978.

Facts on File has compiled information that chronicles the development of the worldwide problem of political prisoners. It records accusations, defenses, and counter-charges of the political entities involved. Sobel makes use of available data and includes a history of efforts made to aid political prisoners and put an end to such treatment. Its organization makes it a useful research source.

The Military Equation in Northeast Asia, Stuart Johnson with Joeseph Yaeger, Brookings Institution, 1979.

Johnson and Yaeger study the present and foreseeable problems in Northeast Asia. They expound on such topics as Soviet interdiction of Japanese maritime trade routes, a Communist Chinese attack on Taiwan, a new Korean War, and US force structures in the area. In this work, the Brookings Institution has produced a sound and useful study.

World War 3, Ed. Shelford Bidwell, Prentice Hall, Englewood Cliffs, NJ, 2978.

This "military projection founded on today's facts" consists of two parts. The first is a discussion of the military balance and current global tensions. The second is an imaginary portrayal of how WW III breaks out and what course it would take. Shelford Bidwell has created a near-realistic and interesting account of the world's next war.

The primary function of every commander is to train his troops. In carrying out that mission, it has been my experience that through the use of actual examples from military history, a teaching point can be driven home far more effectively than through the process of

repetition.

One day, for example, I was observing training in OPSEC being presented to some of my line infantry personnel. No matter how much the section leader emphasized the importance of "scouring the battlefield" for items of possible intelligence interest, the troops equated such an activity with "police call." Obviously, this had as much appeal to them as a date with "Typhoid Mary."

I also noticed in additional OPSEC training that while most troops gave lip service to the importance of not telling everything they knew to anyone who would listen, the human penchant for appearing important by having something "juicy" to say was hard to

overcome.

In the wrap-up of the OPSEC training during that period, the S2 asked me to make whatever remarks I wished to the assembled troops.

I decided to tell them a story to underscore the point of their

OPSEC training.

The story began on the morning of September 13, 1862. Private B. W. Mitchell of Company F, 27th Indiana

Volunteer Infantry, was boneweary by the time the regiment reached the town of Frederick, Maryland that autumn

When the company commander told the men to take a break, Private Mitchell stacked his .51 calibre springfield musket in a squad rack and curled up in the dew-moistened grass.

The Army of Northern Virginia that had invaded Maryland had camped on the same spot just the day before and the camp ground was littered with paper, trash, old letters and used tobacco cans.

Mitchell stretched out on the

grass as his sore muscles began to relax, and his hand touched something that attracted his attention. He rolled over and picked it up. It was a roll of paper, and as he examined it. three cigars fell out of the wrapping.

Cigars were a welcome find at any time and the Indiana private made a quick deal with Sergeant John Bloss, trading him one of the cigars for a match. As the two blue-clad Union soldiers lay in the grass enjoying their smokes, they began to look at the piece of paper which had served as a wrapping for the

What the two Hoosier soldiers read made them both sit up in surprise. They looked at one another with disbelief. Then, as the shock wore off, they leaped to their feet and ran past their

now sleeping company commander and directly to the headquarters of the 27th Indiana Regiment.

Brushing past a sentry standing outside the Regimental Commander's tent, the two men confronted Colonel Silas Colgrove with the document.

Colgrove read the paper and immediately shouted to his orderly to saddle his horse. Thanking the two Hoosier infantrymen, he ran out of his command tent, mounted his stallion and galloped for the command post of the division commanding general.

The division commander was away inspecting one of his units, but the division adjutant, Colonel S. E. Pittman read the document. He immediately commandeered Colonel Colgrove's horse and galloped to the headquarters of the Union Army of the Potomac and to the quarters of General George B. McClellan.

When Colonel Pittman arrived, he burst past the orderlies and Army adjutant and barged into General McClellan's officeinterrupting a briefing sessionto hand the document to the general personally.

What General McClellan read was an authentic copy of Confederate Special Orders #191, signed by Confederate Army Commanding General

Robert E. Lee. The orders directed the complete and detailed disposition of the entire Army of Northern Virginia directly in front of McClellan's

McClellan immediately recognized that through a gross lack of what a later generation would refer to as "OPSEC." a goldmine in terms of military intelligence had fallen into his hands.

In the history of warfare, few generals have been as fortunate as McClellan was on that early autumn day. Everyone in the room with McClellan also immediately realized that the commander of President Lincoln's army in Maryland had a golden opportunity to annihilate the Confederate Army and end the war that had already raged for little more than a year.

But, in the excitement of those first 10-15 minutes, the full impact of the importance of the find was such that no one thought of maintaining proper

security.

Everyone in the general's quarters rejoiced, staff officers openly talked about the contents of the document, NCOs standing on the periphery of the staff briefing room picked up on the conversation, and the euphoria passed along to troops outside the briefing room.

Soon, the news of the "find" swept McClellan's entire camp.

But, circulating among the encamped Union soldiers was a civilian merchant who was selling the soldiers personal goods. Appearing to be a Union sympathizer, he was, in reality, a Confederate courier.

That night he departed Frederick, Maryland, and galloped as fast as he could to the camp of Confederate cavalry commander J. E. B. Stuart with the news.

Meanwhile, at McClellan's headquarters, an analysis of the orders showed that General Lee had once again split his outnumbered butternut-clad southerners in order to gain a tactical advantage. He had given half of the Army of Northern Virginia to General Stonewall Jackson who was spearheading south to destroy the Union

One of George B. McClellan's personal characteristics was that he was habitually slow and careful, possibly too slow and too careful. It was 24 hours later before the Army of the Potomac began to move with the objective of securing the two gaps in the Confederate lines.

It was during this action that one of the strangest coincidences in American military history occurred.

One of the units ordered into the battle was the 23d Ohio, commanded by an Ohio Lieutenant Colonel. The regimental commander had ordered a special breakfast prepared for all of his staff and troops prior to beginning the attack.

In the assault, the 23d spearheaded the attack and lost twice as many men as did any other Union regiment, as well as its commander who was badly wounded.

The regimental commander would recuperate from his wounds, and former Ohio militia Lieutenant Colonel Rutherford B. Hayes would later become the 19th President of the United States in 1877.

But the mess steward for the 23d Ohio was also destined for greatness. For 20 years after his regimental commander became President, former mess sergeant William McKinley would also take an oath of office, as the nation's 25th President.

But coincidences aside, once

the assault began, the outnumbered Confederates fought bitterly against swarms of Union infantry in the initial stages of the battle.

Then, suddenly, just as the defending lines appeared on the verge of cracking against the strain of onrushing Northern infantry, reinforcements arrived.

In the nick of time, General Longstreet's Army Corps began pouring in behind their Southern comrades and turned back the Union attack.

Where George B. McClellan was slow and cautious, J. E. B. Stuart was quick and bold. Upon receiving the information about the compromise of the Confederate battle plans, Stuart lost no time in informing Longstreet about the compromise of orders. Instead of following his original orders, Stuart ordered Longstreet to do an about face and force march his corps to Boonesboro, 13 miles away.

13 miles away.
In effect, 24 hours after the document had been found, a massive race was underway between McClellan's Army of the Potomac and Longstreet's Confederate Army Corps from Stuart's command.

The race was determined when the bloodied 23d Ohio reached the crest of the Confederate defenses and was preparing to exploit into the Confederate rear area, when Longstreet's fresh reserves arrived to regain the line. Robert E. Lee, upon receiving the reports of the previous hours, realized that his army had barely escaped being divided and conquered.

To reinforce his position against still-overwhelming odds, Lee withdrew his troops to new defensive positions anchored on a stream outside of Sharpsburg, Maryland.

On September 17, McClellan attacked again.

Within a matter of hours,

70,000 Union troops were battling 50,000 Confederates for control of the stream, a small rock bridge, and the surrounding territory.

The Union Army's strength should have carried the battle. But at the critical moment, the overly-cautious McClellan failed to commit his reserves and Lee escaped across the Potomac to fight another day.

While Antietam Creek outside Sharpsburg ran red with the blood of 26,000 casualties from both armies for days following the battle, word came that Stonewall Jackson had taken Harper's Ferry and totally destroyed a Union force of 12,000 troops in a battle where only 1,300 Union cavalry escaped destruction or capture.

McClellan, the general who had the enemy's entire operations plan dropped in his lap, was relieved by President Lincoln as Commander of the Army of the Potomac. The Civil War was about to enter still another agonizing and bloody phase.

In retrospect, the events surrounding the battles Boonesboro and Antietam Creek were products of the lack of operations security in both armies.

Yet, due to an effective intelligence system, bold and rapid reactive capacity on the part of the Confederate commanders to correct an error, and a corresponding lack of such capabilities on the part of the Union high command, the war would drag on for three more years.

...And somewhere in the Maryland countryside, around the campfires of the 27th Indiana, a Union private soldier named Mitchell wondered whatever happened to the piece of paper he gave to his regimental commander, if he survived the fighting of that week...

(Continued from page 43)

you are not aware of the career progression pattern for your MOS, contact your MI career branch for guidance.

E-8 board slated

An E-8 promotion board is slated to meet in late October at

Fort Benjamin Harrison IN.

The primary zone will include all E-7s with a date of rank of Sept. 30, 1974 or earlier. Secondary zone will include E-7s with a date of rank between Oct. 1, 1974 and July 31, 1976.

To be eligible, soldiers must have a basic enlisted service date of Oct. 31, 1972 or earlier, a

high school diploma or GED equivalent and not be restricted by the provisions in paragraphs 7-37 and 7-61 of AR 600-200.

Soldiers with an imposed or initiated bar to reenlistment or an approved retirement effective on or before January 1, 1980 will not be considered.

The Rosetta Stone: A Management Tool for Training

by MAJ Michael J. Gannon

If a Commander only had to concern himself with weapons and tactics for his unit, training problems would be minimal, but the magnitude of mandatory classes a unit must face has made it quite challenging for that commander's trainer.

How do you fit monthly, bimonthly, annual and semiannual classes into the unit's training schedule? How do you find the time, money and land to qualify with your weapons, to improve coordination in the field and train your people for the SQT, or to do those jobs that are essential in maintaining unit readiness?

Every training manager follows some method in developing a viable unit training program. To develop a successful program for maintaining combat readiness, we must first analyze the unit's missions and determine what current resources are available to accomplish both individual and unit training objectives. Unfortunately, training managers too often find themselves trying to conduct more training than the unit can support with availa-

ble resources (personnel, money,

training areas and time).

The days of large scale field exercises with armor divisions trying to outmaneuver each other and cavalry regiments screening the front flanks of the division probing for the "bad guys" are gone. No longer do we hear the mighty names of "Desert Strike" and immediately conjure up the picture of Iron Chariots rumbling across the vast desert of Nevada and California. Today, when we hear "Bold Eagle" and "Gallant Crew," we picture one or two brigades on each side in a highly structured scenario and restricted to relatively limited terrain in a three or four day exercise.

As already mentioned, space available for training is a major factor influencing the selection

of a unit's training method or plan. Whether planning for an armored division or a separate battalion, all trainers must ask themselves "Where do I get the land to train my troops?" Equally influential is the availability of money to train these units.

With the limited training

Webster defines the Rosetta Stone as "the black basalt found in 1799 which, through inscriptions in hieroglyphics and Greek, provided the first clue to the decipherment of Egyptian hieroglyphics." Our Division Rosetta Stone allowed us to translate a formerly unmanageable conglomeration of regulations, changes to regulations and "best guesses" at training for a division into a clear and concise chart that is not subject to daily or weekly changes.

resources available, training managers must insure that every training period is directed toward attaining and maintaining an alternate goal of combat-ready units for successful deployment during a contingency operation.

In 1976, the 2d Armored Division was confronted with this very realistic fact. Personnel were abundant (two armored divisions at Fort Hood), money was in short supply and real estate was hard to come by. The division approached this challenge with a revision to its training guidance and published 2AD TC 350-2 (Training Management). Some of the goals that the division had in mind when publishing this document were:

 To carefully control expenditures of assets such as funds, lands, ranges, time and support.

 To better organize required training around tasking commitments.

 To give the training manager a single guide to plan training and attain assets.

• To provide detailed planning guidance down to company level

for at least six months, preferably for one year.

The project began with the gathering together of all training documents, which included a letter of instruction, standard operating procedures and specific training guidelines and putting it all into one document. The document established procedures for the implementation of the training program within the division and provided resource information necessary for long range planning and training management. Included in the document is detailed information on how corps and divisional assets are controlled and obtained by the unit, how and when various taskings are distributed and carried out from guard and duty, to ceremonies, to ARTEP support and information on new division training assets. The ultimate goal of the document was to provide to a new S3 in the division an opportunity to learn how to operate within the division in the least amount of time. The document is continually updated and improved.

The construction of the training plan was determined by which major training event must be executed by each unit of the division and the time parameters for completion of the event. Examples are ARTEP, tank gunnery and Annual General Inspection. The next step involved the computation of the costs of each event in time money, land and range assets available and the support required from other units (Medical, Maintenance, etc.). Finally, all these elements are weighed against tasking and scheduled for times when required assets are available to support the unit. To accomplish this, a chart, called the Division Rosetta Stone spans an 18-month period. It is developed, based on fiscal years, and depicts the major subordinate commands and their battalions, separate battalions and companies.

The planning sequence for battalion level training is as follows: units and mechanical data are entered, then guidance from above is applied, concerning how much land will be available and when. Distribution of these assets is based on a nine-week cycle used to determine division land priority and range priority. A typical nine week range plan accounts for conflicts between ranges and allows training managers to plan as far ahead as needed to lock in training events. Major training events are blocked as close to the desired time as possible within corpsassigned priority periods. Then the taskings are checked for interference with training events.

The drafts of the Division Rosetta Stone are presented at a week-long "Relentless Progress Seminar" conducted at the division headquarters. During the seminar, each major subordinate commander has the opportunity to discuss his training accomplishments for the past six months and his plans for the next six months with the commanding general and his staff. In effect, the subordinate commanders form an agreement to establish training for the next six months and to plan training for the six months following. This, of course, must remain flexible, but it gives the division staff an idea of what to expect.

The 2d Armored Division provides detailed annual training guidance to brigades, separate battalions and companies through the Division Rosetta Stone. An ongoing inspection process (formal and informal) is conducted to insure that this guidance is followed. The formal evaluation (i.e., Tank Table VIII, Mechanized Platoon Attack Course, CO/TM Live Fire, ARTEPs and SQT) tells the subordinate commander where he is with respect to training. The informal training inspection, conducted at random, assesses personnel accountability and level of performance of specific tasks.

Brigade provides detailed annual planning guidance to battalion, coordinates use of allocated assets and measures results of battalion and company level major training activities.

If the brigade plans training for their battalions, how then does a separate battalion plan for training?

When the 522d MI Battalion (EW)(CBT), 2d Armored Division (known as the CEWI Battalion) was activated in 1976, it was formed from III Corps and 2d Armored Division assets. At that time, the battalion commander planned to make the battalion an effective unit as rapidly as possible and insure full acceptance by the division. This was done in record time thanks to the professionalism of battalion and division personnel.

With the integration of the battalion completed, it came time to put together a viable and effective training program.

The division training program is decentralized to the maximum extent possible. As a separate battalion within the division, the 522d Military Intelligence Battalion (EW)(CBT) is an externely complex, multi-faceted intelligence organization. The peacetime mission of the battalion includes: conducting and providing GSR training and support, OPSEC training and assistance, IPW support and training, II support, enemy threat training and Electronic Warfare training in support of the 2d Armored Division

Fifty-five different MOSs requiring extensive training to maintain proficiency and prepare for SQT are represented within the battalion. This problem, coupled with the extensive support given to all other battalions' ARTEP in the 2d Armored Division, has made training management a real challenge for the battalion S3. The S3 is responsible to the battalion commander for integrating the Commanding General's goals and objectives into the battalion's training program. Additionally, responsibility for establishing management guidance, coordination, supervision/evaluation of training and planning, organization and direction of company level training lies with the battalion's trainer. The battalion insured that the division's goals were met by establishing and integrating subobjectives into the company's training program. This process was done by creating a battalion Rosetta Stone.

In accordance with guidance from division, the battalion pro-

vided detailed planning guidance to companies (goals, areas of concentration) and subsequently formulated a 12-month training calendar. To implement the 2d Armored Division Rosetta Stone, the 522d Military Intelligence Battalion compiled its own Rosetta Stone. Every spring, following distribution of the draft 2d Armored Division Rosetta Stone and prior to the Division's "Relentless Progress" Seminar, the 522d MI Battalion conducted its own seminar. Battalion scheduled centralized training, ARTEP support and field commitments. The companies then submitted their proposed training schedules. Responsibilities were assigned for "drownproofing," CBR, etc., to insure each company was afforded support during their busiest periods. Upon concurrence by the companies of the Battalion Rosetta Stone, the document was published and implemented throughout the year with periodic and subsequent updates.

The Rosetta Stone was the cornerstone of the training administration program. It was simply the Battalion's training forecast. Weekly training meetings conducted by the battalion commander insured smooth execution of that master plan. The battalion commander, S3 and company commanders discussed the following week's schedule in detail and thereby precluded possible coordination problems. The following two weeks were also discussed but to a lesser degree. The battalion commander provided goals and areas of concern. Training assets such as land, ranges and school allocations to support the training calendar were surfaced at this time and noted by the appropriate staff section for subsequent

action.

The subordinate companies then provided detailed planning guidance to their platoons for major training to be completed to insure that a particular goal was achieved to the proper standard. The company commander provided platoon time and training assets. Vehicle services were incorporated into the schedule to alert personnel responsible for vehicles of the maintenance requirements. He evaluated the platoons and con-

Subordinate platoons conducted training in accordance with the battalion Rosetta Stone and the company training plan. They developed training schedules (subjects, block of time) and provided the company commander with a detailed outline of training activities for the following two weeks.

The 2d Armored Division Rosetta Stone is the skeletal framework on which decentralized training is hinged. Decentralization addresses how to train, not ultimate levels of profi-

ciency to be attained. By conducting training at the lowest possible level, flexibility and timeliness can be maximized. Centralization requires resources and familiarity not normally available above company or battalion level. The train moves too fast. People and day-to-day commitments change so rapidly that, by the time brigade or division headquarters organizes something, it is almost always out of date in some respects. The only workable solution is for higher headquarters to devote time to those things that subordinate headquarters cannot do-such as planning and controlling division level exercises and scheduling of range use-and those things that the division com-

mander must do—such as set broad training goals and standards.

The approach taken to managing training commitments within the 522d MI Battalion was simple but effective. The Division Rosetta Stone offered guidance for external support. The Battalion Rosetta Stone was the internal mechanism to insure maximum use of available time, thus maintain proficiency in these days of stringent land management and tight money.

Notes

'2AD TC 350-2.

²Fact Sheet - G3, 2d Armored Division, date unknown.

³Ibid

An ARTEP in Action

by Mr. Mark Fauk

USAICS has been in the Army Training and Evaluation Program (ARTEP) writing business for about five years and has has not had many opportunities to observe an ARTEP in action. However, the Collective Training Division of Directorate of Training Developments was recently invited to observe an external evaluation being conducted from 30 April to 5 May at Fort Bragg, NC. The 525th MI Group, provi sionally organized under a CEWI TOE 30-102 administered an external ARTEP evaluation to its organic Tactical Exploitation Battalion (TEB), (TOE 30-125).

Commanded by COL Sidney Weinstein, the 525th MI Group began preparation for the evaluation in December, 1978 by writing the exercise scenario, the evaluation requirements and the more than 160 roles which would be played to exercise the TEB interrogators and counterintellinence agents.

The XVIIIth Abn Corps G2 was designated to provide the evaluation team, headed by LTC Malcolm L. Hollingsworth as senior evaluator. Since the name of the ARTEP game, philosophically, is diagnostic evaluation to identify and correct training shortcomings, it was important to see if

that philosophy was in any way related to practical application. It was very refreshing to learn that the attitude pervading the command of the XVIIIth Abn Corps, the 525th MI Group, and the TEB, commanded by LTC Henry S. Drewfs, found the ARTEP a commander's tool to assist in training a unit to perform critical combat missions and survive on the battlefield. Such an attitude is critical to effective, realistic and honest diagnostic evaluation.

So much has been written about the many abuses of the ARTEP, that this effort by the 525th MI Gp must be singled out as one fine example of how the ARTEP can be used to assist commanders and training managers in increasing the combat readiness of their units without fear of relief or bad report cards.

Was the ARTEP evaluation administered to the TEB a success? That question is really not the proper one. The question should be, did the personnel assigned to the TEB learn anything from the experience? If this question can be answered in the affirmative, then the ARTEP fulfilled its proper function.

USAICS is critically dependent upon feedback from using units concerning products it develops. Visits such as the one to the 525th MI Group, either during the ARTEP evaluation or immediately thereafter provide the most responsive feedback for use in updating and improving products to support unit training programs.

Only because the commanders and staffs of the XVIII Abn Corps, the 525th MI Group headquarters, and the TEB, were concerned enough about this feedback to alert USAICS of the upcoming evaluation did we have the opportunity to observe an actual ARTEP evaluation. This will lead to improved training products. If your unit has recently had an ARTEP, or will soon undergo either an internal or external evaluation, we would be grateful if you would let us know about it.

We are not "inspectors from Huachuca," but come only as observers in hopes of improving products which are developed for your use. Any questions, comments, "heartaches," or information regarding ARTEP are encouraged and welcomed. Call us at AUTOVON 879 3185/5769 or commercial (602) 538-5769, our 24-hour HOTLINE. If you wish to discuss subjects not related to ARTEP but for which USAICS is proponent, we would be happy to direct you to the proper office.

I again wish to commend the planners, evaluators, controllers and participants for their professional efforts in the execution of the TEB ARTEP-79.

The Lessons of Certain Sentinel

by MAJ Norman R. Blaylock

Introduction

Major Blaylock has captured the essence of what VII Corps has practiced and trumpeted throughout the Army, that ALL "Intelligence must respond to Commander" in the quest to "Win the land battle." In championing this cause, VII Corps, and the National, and Theater intelligence communities have created and tested under stringent REFORGER standards the genesis for a Corps Tactical Intelligence System (CTIS) for the 1980's.

The CTIS is a success. Its mechanism ensures a Commander's receipt of timely intelligence from the myriad of intelligence collectors entering the nation's inventory now and through the 1980's. However, advocates for layering of additional stifling collection management at echelons above the Corps challenge to rupture the heart of the CTIS' success, its timeliness and responsiveness to the tactical commander.

The commander must have timely intelligence to influence the first battle. A fact which is undisputed, yet not doctrinally established with the Army. Accordingly, the Army must firmly grasp the proven CTIS as doctrine and document it immediately within Corps Operations, FM 100-15, (Draft), to provide the tactical commander a means for responsive intelligence, today

and for the future.

PAUL J. GOREY

Colonel, GS

AC of S, G2

HQ, VII Corps

Prompted by the extraordinary costs of our modern intelligence apparatus both the service and civilian intelligence agencies have come under substantial pressure from Congress, the Office of Management and Budget and the Department of Defense to derive maximum benefit from the strategic collection program.

Responding to this impetus,

JCS developed the Tactical Exploitation of National Capabilities (TENCAP) concept which granted the tactical commander entry into the national tasking channel through the Corps Intelligence Officer. Complementing TENCAP was the 1976 Intelligence Organization Stationing Study (IOSS) which abolished the vertical Army Intelligence structure by directing the assignment of collection capabilities to tactical commanders.

To help assess the viability of both TENCAP and IOSS, an intelligence concept was developed for REFORGER 77 (Exercise Carbon Edge) which was designed to measure the impact of strategic collectors on tactical operations. That unique test was discussed in the "The Lessons of Carbon Edge" Military Intelligence, Oct-Dec 78). The article concluded by urging that a follow-on exercise be conducted which would again subordinate the full panoply of national and theater intelligence collectors to a maneuver division.

Eighteen months later the sequel occurred in VII Corps in FTX Certain Sentinel (REFORGER 79). This time, however, Echelons Above Corps (EAC) collectors were available to support both divisions during their sequential conduct of the active defense. Wartime intelligence relationships were mirrored to the maximum extent possible

Throughout the exercise for each division, a reinforced EW Co and 12 Standoff Target Acquisition System (SOTAS) operated in continuous direct support. Certain Sentinel was the first exercise in which both divisions had an organic SOTAS capability. More than seventy Allied Long Range Reconnaissance Patrol Teams (LRRPs) augmented the array of Signal Intelligence (SIGINT) and Imagery Intelligence (IMINT) collectors. This provided a HUMINT capability, creating in turn a true multidisciplined collection package for use by the player G2s.

In all, over 2500 intelligence personnel, operating 16 separate

collection systems, ranging from battalion level ground surveil-lance radars to the most sophisticated national systems, were tested in the most hostile environment short of war. The collectors had to contend with locating a maneuvering combat force and discerning its intention in a European winter environment.

The key lessons of Certain Sentinel however, like those of Carbon Edge, were not focused on the performance of personnel or systems. Note: A Special After Action Report was prepared for the CINCUSAREUR which outlined the performance of each collection system and compared its performance against its activities in Exercise Carbon Edge (REFORGER 77). Rather, the key lessons concerned the very crux of the doctrinal debate on-going in the European intelligence community and to a lesser extent at TRADOC, DA and JCS. This debate centers on the echelon to which control of EAC collection assets will devolve in time of war since no published doctrine on the roles of corps or EAC exist.

The success of Carbon Edge and Certain Sentinel unfortunately did not meet with universal acclaim. Segments of the intelligence community continue to propose a return to the rigid centralization of collecting management and dissemination functions at theater level, claiming both exercises were aberrations. Fortunately, the lessons of Certain Sentinel argue vigorously against such a course of action

action.

In Exercise Certain Sentinel as in Carbon Edge, both the Corps and Division G2 sections managed the full spectrum of collecting assets without resorting to assistance from higher head-quarters. The two years of intense concentration at both echelons on the development, activation and employment of Collection Management cells proved to be a particularly worthwhile investment. These Collection Management cells were formed at both corps and

The second argument being advanced by advocates of EAC control is that assets, particularly strategic and theater collectors. are going to be so scarce in war that an "honest broker" is required to represent the contending interests of the various echelons. Certain Sentinel demonstrated that this is not true. Financial constraints and the effects of the European winter limited the number of collection sorties in Certain Sentinel to almost half those employed in Carbon Edge and replicates even a worst-case wartime factoring of sorties. Nonetheless, by using "situation sensitive collection management techniques," the limited national/theater collection missions were so orchestrated that consumers were able to maintain an accurate watch over the battlefield. EAC collection assets were focused exclusively on the critical information gaps by using these procedures, Certain Sentinel showed that it is not necessary for corps or divisions to have control over great numbers of EAC assets or for

extended periods of time if corps or division control of the assets is absolute once allocated. It can therefore be concluded that suffient EAC assets will be available to serve multiple clients sequentially; thereby eliminating the need for an "honest broker."

Now that intelligence collectors are recognized as potentially the key combat multipliers, their allocation must be controlled by operational commanders. This is imperative during the conduct of an active defense since collectors can be used to perform a variety of separate and distinct missions. Collectors can be weighted during economy of forces operations to add viability or conversely can be used to multiply the effects of a thickened defense at the point of main attack, or a combination of both. Just as the active defense concept necessitated a complete rethink of our earlier procedures for orchestration of weapons systems, so also the use of intelligence assets. Collectors must be focused by tacticians as an element of combat power. Reinforcing the argument for periodic but absolute control of EAC collection assets by corps and division is a painful anomaly which occurred during Certain Sentinel.

During a critical phase of the exercise, the Blue Corps All Source Intelligence Center (ASIC) lost continuity on the Orange brigade which conducted the main attack; leading to a flawed intelligence estimate at corps level. Fortunately, the same phenemenon was not repli-

cated at division level since it controlled all collection assets at that time. The Blue Division had located the Orange brigade but had failed to report the information to Corps. While the incident is embarassing, it serves to reinforce the need for allocation of collectors to the proper echelon at the proper time.

Intelligence assets can enable the defender to see the battle-field and win the first battle, but only if the systems are available to tactical commanders who can influence their disposition.

Corps, as the senior "tactical" headquarters with responsibility for both the enemy along the FEBA and the location of the second echelon, represents the optimum point to blend tactical and strategic intelligence interests.

The key intelligence lesson emerging from Certain Sentinel is the critical need to institutionalize in Army doctrine the expanded role for Corps and divisions in the control and management of national and theater collection systems. Both VII Corps REFORGER Exercises have demonstrated the ability of the tactical commander to effectively employ the systems as an element of combat power. The advocates of "centralization" must not be allowed to lead us back to the dark ages. Green doors must stay open and the Army must never again allow intelligence collectors to be viewed as other than combat multipliers.

ESERVE

The Office of Reserve Training, USAICS, has developed a year-round training program for members of the Reserve Component. Nine courses of instruction will be offered, seven of which will be MOS/SSI related. This program is designed to give individuals and troop program units greater flexibility in the scheduling of training and an opportunity to have personnel qualified in an MOS/SSI in a more timely manner.

Troop program unit personnel are required to make application for quotas through command channels in the format required by their CONUSA. Members of the Individual Ready Reserve are required to submit applications to RCPAC. ATTN AGUZ-OEP-P.

Class size will be limited to 30 students, and classes which have less than 15 students are subject to reacheduling. Class report dates are on the Sunday prior to the actual commencement of instruction

commencement or instruction.

The Multidiscipline Course requires a TOP SECRET clearance with eligibility for SI access.

Phase I of the Intelligence Analyst. Aerial Surveillance; and the Tactical Intelligence Staff

Officer courses require only a CONFIDENTIAL clearance All other courses and phases of
courses, unless noted above, require SECRET clearances.

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Post Graduate Intelligence Curriculum

The nine-month Post Graduate Intelligence Curriculum (PGIC) currently conducted once a year by the Defense Intelligence School, is one of several special purpose programs available to certain company grade MI officers. PGIC has an outstanding reputation and the number of MI officers desiring to attend always exceeds the 17-21 allotted to MI Branch, MILPERCEN.

Officers often ask to attend PGIC in lieu of the MI Officer Advanced Course (MIOAC) believing the courses to be equivalent. Actually, the two courses are very different. A major part of the MIOAC curriculum deals with emerging Army intelligence doctrine, systems and organizations. Significant portions of the MIOAC are designed to bring officers from three different specialties (35, 36, and 37) to the same level of understanding in all three specialties but the emphasis is on Army intelligence in a tactical environment. An MI officer must successfully complete MIOAC to be considered initial specialty qualified. On the other hand, PGIC is for mid-level intelligence professionals, military or civilian, of any DOD

service or agency and its curriculum emphasizes national policy and strategic intelligence in a joint environment. It is designed to produce strategic intelligence specialists.

It is apparent from discussion with applicants that the criteria for attendance at PGIC are not always understood. Since late-1977, attendees have been selected against the following criteria:

- Holds Specialty Code 35, Tactical-Strategic Intelligence, as one of two OPMS specialties.
- Strong tactical intelligence background.
- Graduate of non-resident MIOAC.
- Assignable to strategic intelligence (35B) position in National Capital Region or any major command.

Many MI company grade officers do not meet the rather narrow criteria for PGIC. Disapproval of an application does not necessarily reflect adversely upon the applicant. Some meet the basic criteria but cannot be selected for other pertinent reasons. Because of the requirement to make "gates," it is nearly impossible to select an aviator even though he/she holds Specialty 35. There is seldom time for PGIC if the officer's "other" specialty requires civil schooling. Few branch transfers are selected for PGIC, as the resident MIOAC provides a broader view of Army intelligence and better enables the officer to catch up with his new MI peers. A few applications must be disapproved simply because the applicant is not available for reassignment when

the Program starts in September. (A pending change may allow future students to start PGIC in October, January, March and July of each year.)

A "strong tactical intelligence background" is generally defined as three years in more than one intelligence position in a division or corps.

It is MI Branch policy that credit for Advanced Course completion is awarded only upon graduation from the resident MIOAC. The non-resident MIOAC curriculum, while valuable in several regards, is judged insufficient to change the officer's official military education level. As an exception to the policy, constructive Advanced Course credit is awarded for non-resident MIOAC graduation providing the officer has a strong tactical background and graduates PGIC. Additionally, officers slated for PGIC are not ordered to resident MIOAC as the time in student status would be excessive.

The majority of 35B position requirements are in the Washington, DC area. Whenever possible, PGIC graduates are assigned against these requirements in order to conserve money. A limited number of graduates go to the 35B positions which exist in most major Army and joint commands.

From the Army point of view, PGIC offers an excellent means of preparing a Specialty 35 officer for a 35B position. It is, however, not required for specialty qualification, nor is it mandatory prior to assignment to a 35B position.



"OFF-THE-STREET" MOS 97B is IN.

Effective 15 May, 1979, soldiers may enlist for training in MOS 97B. This change is contained in Change 11, AR 601-210. Significant changes in the

MOS prerequisites for enlistees are the dropping of the age (21 yrs.) requirement and, of course, dropping of the two years' prior service requirement. All MOS 97B enlistees will be processed at selected basic training sites (Forts Dix. Gordon, Jackson, Leonard Wood and McClellan). The revised program has no effect on the processing of inservice applicants for MOS 97B. Any non-prior service individual approaching you with an expressed interest in applying for MOS 97B should be directed to initially process through his local Army Recruiter.

Enlisted Evaluation Reports and Promotion:

It appears everyone is aware of the importance of outstanding evaluation reports when competing for promotion, however, a maximum numerical score is not the only critical factor. Enlisted Efficiency Reports must reflect duties and duty performances within PMOS and career development recommendations in line with the career progression pattern for your MOS. For senior grade promotion consideration, the holding of supervisory positions should also be stressed. If

(Continued on page 37)

Intelligence Operations When Communists Fight Communists

by CPT Edward W. Kane, USAR

Recent events in Indochina have finally brought to fruition what has only been speculation up until now: the possibility of a major military confrontation between well-armed Communist powers. Who would have thought five years ago that the Vietnamese would launch an incursion against communist Cambodia or that China would invade Vietnam? Perhaps no organization was caught more by surprise than the intelligence community at large.

It is appropriate to discuss the importance of gathering, processing and disseminating military intelligence when American strategic interests are not threatened. We must recognize the tremendous expense of producing intelligence and, given the expense, we must consider whether we should even bother producing intelligence at all.

I believe that a "who cares?" attitude can be defeated on several grounds:

First, and most significantly, is the potential for a spillover effect. Throughout the 1979 Sino-Vietnamese conflict, there was speculation, not without foundation, that the Soviet Union would enter the conflict. This would, of course, impact significantly on the strategic interests of the United States. No one was ever certain exactly how far the Soviet Union would tolerate the invasion of one of its staunchest allies and when it might enter the fray.

It is, of course, always in our interest to be informed of the latest tactics, deployment patterns and order of battle information on potential adversaries and any opportunity to update our files should be exploited.

 Input from intelligence sources is obviously of great value in determining the US strategic position, particularly as it relates to foreign policy. Indeed, the American decision to stay out of the conflict was obviously derived from information obtained from the battlefield.

Perhaps at no time in recent history has a major military campaign of such international importance been evaluated with such a limited data base. I happened to be in Tokyo, Hong Kong and Bangkok (the three main Asian listening posts) and observed first-hand efforts by the news media to monitor progress of the war. It became a ritual at 1700 hours Vietnam time for interested parties to gather around the elaborate radio mechanism and hear the staticfilled transmission begin, "This is the Voice of Vietnam broadcasting from Hanoi, capital of the Socialist Republic of Vietnam..." Many battle-experienced correspondents who earned their stripes by personally interviewing front line field commanders as incoming artillery exploded around them were given the task of arranging tactical maps and following the war's progress from a propaganda-filled broadcast. As a nation used to being an interested party to most major military confrontations, playing an independent observer was certainly frustrating to the US intelligence community. Without POWs to interrogate or captured enemy material from which to derive technical and order of battle intelligence, the intelligence community could only speculate as to what was happening.

Let us focus a minute on the peculiar aspects of this war and why intelligence gathering was so difficult.

 First of all, neither party used tactical air support and hence there was little air-to-ground, air-to-air or ground-to-air communication and thus, little opportunity for either signal intelligence or electronic intelligence exploitation by a third party. It should be pointed out that the imposition of radio silence was used very effectively by the Khmer Rouge, the Vietnamese and Chinese all of whom employ communication security as integral to their basic doctrine.

High resolution satellite photographs performed very effectively determining whether the Port of Hai Phong had been bombed by the Chinese (we were kind enough to inform the Russians—probably before even the Vietnamese—that it had not), but were ineffective in determining who controlled a battle area. Indeed, it was only upon the announcement of the Chinese withdrawal that we learned that the Chinese had, in fact, captured Lang Song.

 It is inherent to military doctrine of both nations that night operations be fully exploited making non-infrared detection devices less effective.

• The rugged terrain in this mountainous region provided excellent cover and concealment and both parties were extremely capable of using that to its full advantage. Obviously in such an environment, gathering information is more difficult than determining the number of destroyed battle tanks on the sands of the Sinai Desert.

• Most of the fighting involved units of regimental size or less and there was not the opportunity to observe massive troop movements along extended battle fronts. Indeed, some of the combat was hand-to-hand.

What can we learn from this? What may develop is a whole new approach to intelligence gathering and the following recommendations are by no means intended to be exhaustive.

 Perhaps we should place a greater reliance on HUMINT and further develop a network of agents within Communist countries near potential trouble spots.

Should we deem it appropriate, there is always, of course,

the opportunity to share intelligence with one of the adversaries but this involves tremendous risks of "side-taking" in a conflict.

 We could focus more clearly on the intent as well as the capability of a foreign military power to develop possible courses of action of a potential adversary and perhaps place more emphasis on contingency planning from an intelligence point of view.

We have probably not seen the last of communist versus communist conflicts. There is tremendous unrest among the Meo Tribesmen in Northern Laos and Laos has already attacked China verbally. The Vietnamese continue to encounter strong resist-

ance from Cambodian troops loyal to Pol Pot. China and Vietnam have not as yet resolved their differences. Finally, the Soviet Union has continued massive troop deployments on China's border. We can only hope that, should future conflicts develop, the intelligence community will be better prepared.

Military Intelligence: Proposed Themes for 1980

Proposed themes for Military Intelligence in 1980 are listed below to give you, our audience, an idea of what topics we plan to explore through the coming year.

You, the readers of Military Intelligence, are the experts who can provide the magazine with input in one, or several, of the areas presented in these themes. By providing themes well in advance of publication dates, we hope that we will give you time to think about those areas that interest and concern you so that you will write for us. We have received a great deal of encouraging feedback from you for printing proposed themes for 1979 in last year's July-September issue.

Articles need not deal with the theme in order to be accepted for publication in any one issue. We strive to cover as wide a range of the intelligence field as possible in every issue. Therefore, your article on some topic not listed below will also be welcome at Military Intelligence.

Articles should be submitted by the middle of the first month of each quarter (January, April, July and October) or earlier, if possible. If you have questions or comments, contact us at the address/autovon found on the index page.

The Military Intelligence Magazine Writer's Guide can be found on page 54 of this issue. Additional copies can be made available on request.

Thank you very much for your support.

Editor

Military Intelligence: The Reserve Component January-March 1980

Training
Manpower
Interface with Active Army

Strategic Level Intelligence Interface April-June 1980

INSCOM and Strategic Intelligence
MI Systems and Techniques of NATO
The Changing Face of Intelligence
Mideast Armed Forces
Army Support of NSA
Energy: Strategic and Tactical Considerations

Opposing Forces: The World July-September 1980

Terrorist Organizations
Soviet Military Intelligence
Soviet Tactics on Battalion Level

Soviet Air Support in Central Europe
Third World Use of Soviet and Soviet Bloc
Weaponry
Warsaw Pact Intelligence
MI in Korea: The North Korea People's Army Threat
Counter-Insurgency Since Vietnam
Asia/Mideast Intelligence Organizations
OPFOR

CEWI in the Active Army October-December 1980

Implementation Army-Wide Progress Report A Word from CEWI Battalion and Group Commanders

Other ideas for articles within (or beyond) the scope of above themes: Division 86; Courses (Officer and Enlisted Counterpart) at Fort Huachuca and Fort Devens; Threat Picture (short quarterly department with short intelligence features or with a study of one Warsaw Pact or NATO country and its capabilities).

by

MG Edmund R. Thompson and

LTC Leonard J. Loomis

Present Value

Today, we have developed a strong body of intelligence professionals who have proven they can do the job in war and peace in tactical, R&D and readiness environments. Communications have become increasingly agile and our product is the child of a technological revolution which is about one generation old. The product is good, both because it is capital intensive and because it is proven.

At Issue

Commanders make decisions based on the activities of their staffs. If staff officers are not using our intelligence product, chances are the commander's decision will not reflect the impact of intelligence either. In general, although we have little difficulty getting information to commanders, we are not having the same success with their staff officers. That means intelligence is not a key factor in management decisions requiring it. Informed intuition and utilization statistics bear out this contention. The bottom line is that commands are not always ready and our standard products may not be just what is needed. I will concentrate my following comments on a narrow but vital portion of our product: sensitive compartmented intelligence (SCI).

Who Needs It

Command requirements for SCI are driven by what they do. Thus, a research and development command will need a preponderance of scientific and technical information (S&TI) but they will also need current strategic intelligence and Indications and Warning information. Readi-



ness commands need strategic intelligence and I&W information, but some of them will also need S&TI.

Having determined the necessary mix of SCI, the next step is to identify functions and associated people who need our product. This process depends upon the effective interaction of three management systems—the Billet Structure, Statements of Intelligence Interest (SII) and the Master List. The separate justification for each billet, command SII and projects on the master list should all match. The match indicates who needs intelligence and constitutes their interest profile. This idea works fine when the Master List exists (usually only in support of R&D efforts) and is current; when SII are up-to-date and the justification for each billet accurately reflects what a person does. If these conditions are not met, action must be taken to get well. Filling pending billets, pressuring personnel to complete their clearance packets and updating SII are some of the steps which might have to be taken. In the absence of a Master List Match, interest profiles can be developed for I&W and current strategic intelligence users by simply asking them what their interests and needs are. Having simply balanced billets with projects and SII, or in some other way developed an accurate interest profile, the next step is to facilitate information flow.

Acquisition and Distribution

In order to accomplish this objective, the Special Security Officer (SSO) must understand the operation of national collection and production mechanisms. He/she must also understand the role the Army's production centers (Intelligence and Threat Analysis Center, Foreign Science and Technology Center, Missile Intelligence Agency, Medical Information and Intelligence Agency) have to play.

The SSO will be taxed to provide timely I&W information to the supported command. National I&W dissemination mechanisms often are defective so that very early warning of crises affecting MACOM interests must at times be inferred from the activities of agencies who do receive I&W.

The SSO must have a clear understanding of the best mechanisms for SCI distribution within the supported command. These may include the following: (1) "A Black Book" made up for and used by flag rank officers and civilian equivalents. In some cases, dissemination to the senior field grade level may be warranted. As resources permit, a duplicate book should be available at the Sensitive Compartmented Information Facility (SCIF). (2) Black Book Inserts. These consist of hard copy documents or command-generated think pieces key officials should see. (3) External Reading Panels. At some locations it is inconvenient and costly for a number of action officers (AO) to visit the

Military Intelligence

Acquisition and distribution can be faulty because of poor staff work and administration. SSO must push for accurate current SII which support projects and I&W needs. Each distribution method should include some feedback mechanisms. Preprinted DFs and forms should be used with Black Books, Panels and Briefings so managers and AOs can indicate cleared personnel who should receive the information we disseminate. Since the command intelligence officer is most often not present while we are about the distribution mission, SSO frequently receives tasking which is a command intelligence responsibility. The tasking should be recorded and copies provided the command intelligence officer and the tasking official. Finally, SSO must standardize and exercise the mechanisms for sanitizing SCI which command operations types need in time of crisis.

You Can Lead a Horse to Water...

Great. You can lead a horse to water but you can't make him drink. We have professional credibility, our product is the best there is. We get it out via Black Book, etc., and still people don't use it. At this point, it's time to get key managers on our side. Not only must they use SCI; they must push its use.

While there are many approaches to the problem, sometimes a frontal attack is best. Simple statements by commanders/chiefs of staff can do wonders.

Non-use boils down to one major reason. In its simplest terms, an SII is a statement of information the command must have to perform its mission. If we have accurate SII keyed to project our I&W needs, the non-use of SCI generated in support of these SII is sloppy staff work. Also, we must do a better job educating managers. They must understand how our product is valuable to them and their action officers. They should have an understanding of how the product is generated at national levels, what its veracity and value are and what bases are used for requesting intelligence for the command-that intelligence responds to validated command requirements. The command does not gets its job done without the intelligence we are trying to broker.

And Help it Drink...

Command pressure and education demand that we do our stuff. The information presented must be palatable, timely and contextual.

What do our Black Books/ Reading Rooms look like? Is the vehicle used to present information totally professional? Nothing turns a manager off more than having to read something that looks like it was produced by kindergarteners in their play room.

We cannot afford to report history.

The information disseminated

must be contextual, i.e., relatable to the manager/AOs knowledge and needs. At times we tend to report a lot of meaningless, high-priced junk. We cannot just wish that a manager/AO will draw a proper inference from information we report. The SSO must insure the manager/AO gets what he needs in some comprehensible relation to other areas of knowledge.

How Are We Doing?

Progress measurement is the toughest objective to reach. Judgments about progress require records keeping. The finer tuned the judgment, the more oppressive administrative requirements are. Good judgments can be made over an arbitrary period (one month) by using SCIF access records, conference/external reading panel attendance sheets and clearances passed as indicators of SCI use. Information obtained from these indicators is not amenable to sophisticated analysis, but helps us come to a more informed opinion about utilization than if we had no system at all

Afterthoughts

Being ready for the first battle means many things to many people. The MACOM which is the recipient of support referred to in this article is continually seeking to be more intelligence driven. Its expenditure of resources in support of intelligence use is earnest proof of its intentions and success. I think it can be more ready and I'm equally sure that achievement is in part an intelligence problem. The ball is thus in our court.

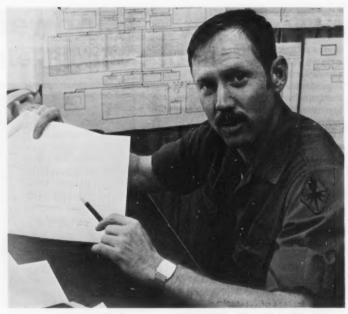
(Continued from page 42)

Tac Intel Staff Officar (35A: 964A)	2	2	27 Jan. 13 Jul 1980	· with the		11 May, 8 Jun, 27 Jul 1989	Requests for unit training materials from USA ICS by either Active or Reserve Component should be addressed as follows: Commandant US Army Intelligence Center and School ATTN: ATSI-RT Fort Huachuca, AZ 85613 Telephone inquiries can be made to AUTO VON 879-5551/3135.
(37A, 35C, 38A, 5M)		14	7 Oct. 9 Osc. 1979; 5 Jan. 17 Feb. 9 Mer 27 Apr. 1 Jun. 22 Jun. 24 Aug. 1890	Sc Off Intel Security Manager		7 Oct. 9 Dec 1979; 13 Jan, 24 Feb. 13 Apr, 25 May, 22 Jun, 18 Aug 1980	
ASI 5M		2	14 Oct. 25 Nev 1979, 13 Jan. 10 Feb. 30 Mar.			9 Mar, 11 May, 27 Jul, 24 Aug 1986	

Portraying enemy electronic warfare personnel in the TAS-VAL exercise are members of an assembled group of inter-service experts known collectively as COMJAM (Communications Jamming). The COMJAM team is led by CPT Otto B. Neely, who is a member of the staff of the United States Army Intelligence Center and School (USAICS), Fort Huachuca, AZ. Working with CPT Neely are Air Defense Artillery Threat Simulators (ADATs) from Fort Bliss, TX and data collection personnel from Fort Ord, CA. To round out the crew, COMJAM has teams of Air Force personnel known as Radio Operator Mechanic and Driver (ROMADs) from Shaw AFB, NC, Davis Monthan AFB, AZ and Bergstrom AFB, TX.

"If the pilots (both AF and Army) use good electronic counter-counter measures," said CPT Neely, "our jamming attempts will have little effect on the outcome of their battle encounters. But I think we've shown them that the enemy has potentially devastating tactics that he can use against them."

The COMJAM crew at TAS-VAL has been assigned three XM-834S highpower UHF Jamming systems for use in simulating "Threat" jamming equipment. To compliment these units, the Air Force has also supplied three AN/MRC-107 VHF-FM radio sys-



CPT Otto B. Neely, from the US Army Intelligence Center and School, Fort Huachuca, serves as the OIC for the COMJAM section at TASVAL. "At the conclusion of each trial (mock battle)," said Neely, "we graph the results of COMJAM's effectiveness. These graphs are used to illustrate to pilots their ECCM effectiveness."

tems mounted in tactical Air Force jeeps.

"These jeeps have literally every radio in the book," said Air Force TSGT August Marra, NCOIC of the COMJAM section. "Together with the XM-834Ss we can effectively jam every known friendly (or in this case enemy) frequency."

My crew has become so proficient at searching for and finding friendly frequencies," said CPT Neely, "that we initially had a problem with pilots using 'Phantom' or 'illegal' frequencies. They knew that under the rules of play here at TASVAL, we (COMJAM) were only allowed to jam authorized frequencies. Although we could monitor most of these transmissions, our hands were tied with regard to jamming them. We've since gotten the situation corrected and the pilots have learned that with short transmissions, or other defensive electronic techniques, they can still transmit and receive and accomplish their missions."

Cobra attack helicopter pilots and OH-58 Scout helicopter pilots involved in the trials at TASVAL probably have an advantage over their Air Force A-10 counterparts. With a helicopter, the pilot is able to mask or "hide" himself from the electronic view of enemy EW systems. Air Force pilots usually maintain higher altitudes, and are more susceptible to "line-of-sight" EW measures.

"If we can't 'see' or detect a radio broadcast or signal directly," explained CPT Neely, "It's very difficult to jam the signal. However, if the pilots make a mistake and stay in a relatively open position too long, we'll find their frequency and jam it "

jam it."

The COMJAM section is not instrumented to be killed during the TASVAL exercise, which gives it the opportunity to select good, high, open positions from which to carry out its mission. This gives it a distinct advantage in the "tactical" situation during the course of mock battles at TASVAL.

"In a real world situation, though, we would be a high priority target. To make this test more realistic, the EW section should be required to move at least once during each trial (mock battle)," CPT Neely suggested. "On the other side of the

Military Intelligence





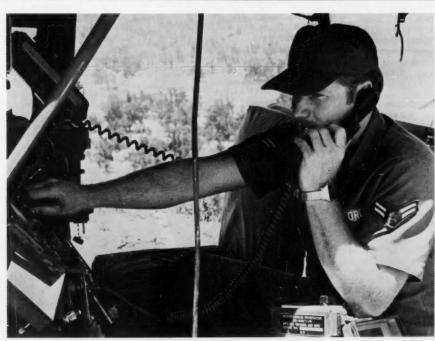
SSG Mark Johnson and SP4 Carlos Nieves scan and listen for "friendly" radio communications. Their jam-

ming center is self-contained and can be mounted on a 2½ ton truck.

coin, however, we're restrained in our efforts in that we can't employ imitative communications deception. In real world conflicts, this would be one of our primary functions."

The COMJAM unit definitely has the capability to perform this "imitative" function, SSG Mark Johnson, NCOIC of the UHF section, explained. "We have tape recorder capabilities built into our monitoring and search systems. That means that if we find a frequency that's being used heavily, we have the option of recording every word that's spoken. In time we would be able to piece together call signs and actual commands or flight orders and have the aircraft do whatever we want. All the voices they hear would be familiar to them, and the pilots would realistically assume that their orders were correct. We could fly them out of the battle area, or divert them to a spot on the map where friendly forces were waiting to blow them out of the sky."

COMJAM is operating at TAS-VAL in a consistant posture and fixed approach. They'll scan the same frequencies during every "trial." and use the same EW



A1C Carl Davis, a member of COM-JAM's ROMAD section, scans enemy

frequencies for authorized or unauthorized radio traffic.

"Our main goal," CPT Neely concluded, "is to insure that all participants in this exercise learn to play by the rules of the game. When they do this, they build confidence in their abilities as pilots to act and react with good EW counter-counter (ECCM) measures. And we really want them to do well, because we're all on the same team. By working together at TASVAL, I think we can only strengthen our battle posture and be better prepared for the next war."

CPT Neely and his COMJAM detachment will continue to interfere with the normal radio procedures of assigned friendly forces. But the friendlies, of course, realize...it's for their own good!

TASVAL

by James Arnold

The largest computermonitored field experiment ever conducted by the US Army Combat Developments Experimentation Command (CDEC), and probably the US Army, got underway in June and is cranking into high gear.

Fort Hunter Liggett, CA, is the site for this Department of Defense directed Joint Test of Tactical Aircraft Effectiveness and Survivability in Close Air Support Antiarmor Operations, more commonly known as TASVAL.

TASVAL began in early 1977 when congressional hearings on the defense budget questioned the survivability and effectiveness of various aircraft against armor. Since the desired information was unavailable, the TASVAL Joint Test Directorate was formed

Initial plans proposed Fort Hood, TX as the test location but because of environmental and instrumentation difficulties, Fort Hunter Liggett became the test site.

The main purpose of TASVAL is to find out how effective US Air Force (USAF) and Marine Corps (USMC) aircraft and Army helicopters are when used to fight threat armored forces. Another major purpose is to determine what mix of jet aircraft and helicopters works best.

Since CDEC doesn't have all the people or equipment needed to perform this test, a large variety of additional resources is necessary. The USAF is flying A-10 jets and will later bring F-4 Phantoms. The Army is using attack helicopter teams composed of AH-1S TOW Cobras and OH-58s. In future trials, the USMC will provide A-4 aircraft and AH-1T helicopters. USAF and Marine Corps aircraft will fly in for trials from Lemoore Naval Air Station, about 50 air miles east of Fort Hunter Liggett.

Army units participating include a reinforced tank battalion, 4th Battalion, 40th Armor,

4th Infantry (Mech) Division, from Fort Carson, CO portraying a threat armor battalion, and two I-Hawk batteries from the 5-57 ADA, Fort Bliss, TX. An air cavalry troop from the 7th Squadron, 17th Cavalry, 6th Air Combat Brigade, Fort Hood, TX has also been flown in. CDEC's Armor Co C serves as the test's friendly ground forces.

General Dynamics' SEL 86 computer will serve as an impartial umpire in this series of mock battles. The ability of friendly ground forces backed by aircraft to resist massive attacks by threat forces will be tested.

Soldiers, weapons systems and vehicles are equipped with eyesafe lasers and laser-sensitive detectors to record hits and misses. Weapons "fire" beams of light instead of live ammunition. The laser detectors send signals when hit by a laser beam. All players and weapons are linked by radio waves to the computer. Each laser and sensor is coded, allowing the computer to identify each player and weapon. The computer analyzes the engagement and determines which weapon was fired, who or what was hit and the location of everyone

Within moments of a hit, the computer sends a message to the hit player, shutting off his laser and informing him of his fate. Without his coded laser he is effectively out of action.

Plans and preparations have been under way for several months. Actual testing began in mid-June and is scheduled to run through mid-September.

This complex test will provide invaluable data to assist decision makers in determining what aircraft mixes will work best in any future situations of this type.





Three USAICS personnel represented the school in Army pistol shooting meets that took them around the country this past summer.

After a month of training at Fort Huachuca in March, CPT John E. Gentry, 1LT Jerilynn D. Howery and MSG Max J. Barrington competed as members of a seven-man Fort Huachuca team in the FORSCOM Matches held at Fort Ord. CA in April. The Huachuca team took third place in the .45 Caliber Team Match at Fort Ord. CPT Gentry, commander of Company A, USAICS, was unable to participate in subsequent matches due to command reponsibilities.

1LT Howery, currently 1st Battalion School Brigade XO, became interested in pistol shooting as a result of her payroll officer duties while she was the XO of Co D, USAICS.
1LT Howery first qualified on the M1911A1.45 caliber service pistol in February and was asked to try out for the Fort Huachuca team one week later by MSG Barrington. At Fort Ord, she was the only woman chosen to represent the Army on its 23-man Western Region Pistol

Team.

As members of the Western Regional team, both 1LT Howery and MSG Barrington traveled to San Diego, CA, Pensacola, FL, and Gulfport, LA before competing in the All-Army Matches at Fort Benning, GA.

1LT Howery and MSG Barrington were then attached to the All-Army Team for the summer, training at Fort Benning and shooting matches in Nashville, TN, Canton, OH, and Camp Perry, OH. 1LT Howery hopes to continue shooting when she PCSs to Germany in January, 1980. Pistol shooting, she said, "is no game and is not easy. The fundamentals can be read in a book in a few hours but the successful application of those fundamentals requires absolute concentration, as well as physical ability, the kind of concentration that takes years to develop. The men and women I met on the Army Pistol Team this past summer were professional, dedicated soldiers and outstanding shooters. I was proud to compete with them...and I look forward to future matches. I plan to join a German shooting club next year and to continue improving.

MSG Barrington has been competing "off and on" with the .45 caliber pistol since 1964. He was one of 40 soldiers chosen for permanent assignment to the All-Army Pistol Team and will PSC to Fort Benning in late August. A communications chief with USAICS' Department of Tactical Intelligence and Military Science, he plans on moving from the conventional team to international team competition. The requirements of each are determined by the National Rifle Association. MSG Barrington considers the international team requirements to be more challenging and rigorous.

MSG Barrington placed 2nd at the All-Army Match out of a field of 160 contestants and has set his sights on bigger game, hoping to compete in the free pistol shooting event in the 1980 Olympic Games in Moscow.

Fort Huachuca is beginning to work on next year's team now with CPT Gentry as OIC. USAICS members are working to field another winning team and contribute shooters again, next year, to the All-Army Team.

The Military Intelligence Photo Contest Winners:



First Prize: SGT Richard Rembisz prepares to put the TLQ-17, Jeep-mounted jammer into operation. Photograph by SP4 James W. Harshman, 358th EW Co, 82nd Airborne Division, Fort Bragg, NC.





Second Prize: The Soviet Ship Kariton Laptev, approximately 90 miles off the coast of Norfolk, VA, 17 November 1978. Photograph by MAJ Bloom and LT Westridge, USMC, Marine Observation Squadron One, VMO-1 MAG-29 MCAS (H), New River, Jacksonville, NC.



Third Prize: Members of the 349th MID (CI), USAR, Dallas, TX, practice their land navigation skills during their April drill at the Texas National Grasslands near Decatur. Photograph by SSG Lance B. Harris.

A Writer's Guide

Military Intelligence is oriented toward the active Army, Reserves, and civilian intelligence personnel throughout the Army and intelligence community. When writing your article, consider the readers. They range from privates to general officers to civilians—all with one thing in common—they work or have interest in military intelligence.

Subjects

We are interested in all subjects relating to the diverse fields of military intelligence including Army doctrine and policies relating to intelligence, tactical and strategic intelligence, organization, weapons and equipment, foreign forces, electronic warfare, intelligence collection (SIG-INT, HUMINT, etc), in fact, any subject of interest to professional intelligence personnel. Historical articles should have contemporary value. If you have an idea for an article, contact us and explain your theme, scope, and organization. It will save you time and facilitate our planning.

Style

Military Intelligence prefers concise and direct wording in the active voice. Every article should have a beginning that catches the reader's attention, a body containing the crux of the article and an ending which concludes or summarizes. Keep the article as simple as possible. Avoid unfamiliar terms, abbreviations and poorly constructed sentences. Do not submit a manuscript unless you are completely satisfied with it. Read it over three or four times, and let a friend read it. It is not uncommon to revise an article several times before submitting a finished manuscript. Do not waste the reader's time with meaningless or repetitive phrases and

words. We edit all articles; however, a polished article is more likely to be accepted than a hurried, mistake-riddled effort. Save us time and give your article a chance; be your own editor.

Acceptance

We make no prior commitments on acceptance until we have thoroughly studied each manuscript. We assume that all manuscripts are original, previously unpublished works, and that they are not under consideration by any other magazine. Authors submitting articles are responsible for informing the staff of Military Intelligence of simultaneous submission and/or acceptance by other publications.

Length

We prefer articles from 1,000 to 3,500 words. We will publish shorter or longer articles depending on quality. Develop your ideas and stop.

References

Cite your references and enclose all quoted material in quotation marks. If possible, credit should be given within the article as footnotes are burdensome and use valuable space.

Copy

Send clean, double-spaced manuscripts typed on one side of the sheet. Your name and length of the manuscript should be typed on the first page. We prefer one original and one carbon copy.

Clearance

The Office, Chief of Information, Department of the Army must clear certain categories of articles written by US military personnel on active duty or civilian employees of the Defense Department. Your local information officer can assist you on this.

Graphics

Artwork in the form of black and white glossy photographs, maps, sketches, or line drawings can enhance the attractiveness and effectiveness of your article. If you have an idea for artwork or know where we can get it, let us know. Remember, "a picture is worth a thousand words."

Biography

Enclose a brief biographical sketch, including important positions and assignments, experience or education which establishes your knowledge of the subject, and your current position and title. Include a black and white, head and shoulders photograph of yourself to use with your biography. Military personnel should be in uniform.

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Summary

If you are interested in a subject, chances are that others will be, too. Pick such a subject. Thoroughly research it and think all your ideas through. Write with enthusiasm, but be natural. Do not adopt a style foreign to your way of thinking and speaking. Revise and rewrite, but retain wit, animation, and personal touches. Good writing is hard work, but it is noticed and the feeling of accomplishment is great.

For more information, contact the Editor, *Military Intelligence Magazine*, Box 569, Fort Huachuca, AZ 85613. Autovon 879-3033 Commercial (602) 538-3033 the problem of poor utilization policies concerning linguists. The article was especially forceful to me because I happen to know LTC Gordon and have the highest regard for his professionalism. Of the many 37D officers acquainted with the linguist problem, he is probably one of the best qualified to expound upon it. He has been primarily tactically oriented since at least the mid-1960's and knows what he's talking about.

There was, however, one area that was not addressed: the shortage of qualified mid-level linguist managers. Because the job of a linguist in a tactical unit is seldom what the soldier expected, he develops an attitude problem that adversely affects re-enlistment rates. Those few soldiers staying in usually opt for warrant commissions and assignments to NSA, resulting in a shortage of E6/E7 linguists in the tactical arena to manage the "first timers."

LTC Gordon's comment "soldiers first and specialists second" is certainly appropriate but should not be confined to linguists as they apply to all EWI MOSs. I am disturbed by a lack of training in wartime survival throughout our divisions. In a highly mobile European scenario with intense levels of firepower, our specialists must be given the greatest possible chance for survival. Consider ground surveillance operators on the FEBA. jamming/intercept operators three to 15 kilometers from the FEBA, sensor people emplacing equipment in front of and behind enemy lines, and even the analysts and support people in rear areas. Have they been taught effective hand-to-hand combat in case they were overrun? Are they really familiar enough with their weapons to have confidence in them or do they fire an obligatory number of familiarization rounds per year? Can they perform their functions while wearing protective masks for extended periods (over 24 hours)? There are so many nonessential/low priority training requirements being forced upon battalion and company commanders that there is no time to teach/maintain the soldier's ability to kill for his country rather than die for it.

Hand-to-hand combat training programs, to include bayonet and knife fighting, could be incorporated into a morning PT program. Protective mask acclimation could be conducted anytime simultaneously with motor stables, garrison duties, etc. A program of route marching could be incorporated with ARTEP training. Many MI or CEWI battalions boast of running 2-4 miles a day in PT. If they lose their equipment, can they become an effective infantry unit and march 100 miles and still fight a pitched battle? It's time we took a good look at this soldier/specialist question and answered it. If we expect our specialists to be soldiers, are we prepared to train them as such or will we throw them to the wolves when "the balloon goes up?"

Robert K. Spear CPT, MI 1st MI Bn Fort Riley, KS 66442

Editor,

As a former 98G Spanish linguist who was assigned to the 358th EW Co, 313th CEWI Bn during much of LTC Gordon's command there, I take exception to some of his statements in "Soldier or Linquist," especially his observation that most linguists lose motivation for merely being assigned to a tactical unit.

Intelligence personnel are among the most open-minded in the Army, and are not likely to be influenced by their instructors or peers to the extent that they will lose "motivation." The ASA personnel I served with were dedicated, responsible, educated and reliable individuals despite official inertia, a pathetically inadequate language "program," and the arduous task of supporting the 82nd Airborne Division year round.

. I believe, along with LTC Gordon, that the linguist will indeed have to learn soldiering in order to survive on the field. LTC Gordon's record while at the 313th CEWI Bn attests to his firm belief in that policy. It will do no good to have damn fine soldiers but lousy linguists.

Eric Y. Young

Editor,

LTC Gordon's excellent article in your April-June issue addresses one of the most important inadequacies of our tactical intelligence units. The unpleasant truth is that few, if any, are capable of performing that part of their missions which requires linguists, even against a single specified adversary.

LTC Gordon has some good ideas. Yet even if all his recommendations were put into effect, MI units would still be unable to produce much intelligence from voice intercept, prisoner interrogation or document translation. The reason is this: good performance as a linguist requires near-native fluency and comprehension.

The new Defense Language Institute (DLI) or DLI/Goodfellow graduate has a good foundation to build on, but can barely communicate with a native speaker, and can understand perhaps half of an ordinary news broadcast in his second language. He can begin to function adequately in his MOS only after working at it full-time for a year or two. He cannot do that in existing tactical units, for all the reasons LTC Gordon set forth. Even a commander as aware of the problem as LTC Gordon, was unable to make a "total immersion" program work.

Assigning all linguists to strategic missions is not the answer. Adequate performance in a field station does not mean adequate performance in combat. Sixty day detached tours for "language maintenance" are not the answer. You can't maintain what you don't have in the first place.

What can be done? I suggest that independent tactical/language detachments are needed for each language of interest. Every member of such a detachment, including the commander, would have at least level 2 proficiency, all in the same language. with the majority at level 3 to 4. The detachments would spend at least three quarters of the work day in garrison in "total immersion," no English permitted. The detachments would accompany tactical MI units when they go to the field. The linguists would have no elite status in the field, but would share "dirty work"

equitably, learn to use their

detachment has been tested, and it works. The 506th ASA detachment, a reserve unit deactivated two years ago, was a successful experiment. Recruiting and retention were relatively easy because the training was meaningful; it filled ten vacancies within the year. The quality of recruits was superior. Members' language proficiency test scores improved by several points from one summer to the next. Language detachments, both active and reserve, can provide what LTC Gordon's recommendations cannot: soldiers who can function as voice interceptors and interrogators in combat.

Jesse J. Frey Major, MI ITAAS SPT ELM/ORA USAISD, Fort Devens

Editor.

Captain Spear's article on OT's for our new EW/I equipment should demonstrate that our product assurance system is as thorough and painstaking as any. It's not all roses, however. The doctrinal considerations which have formed the basis for system acquisition were, in many cases, developed years before the first prototype piece of gear saw the light of day. It may be from three to six years between prototype and delivery of a finished system.

At the same time, the only thing that can be safely said about EW/I doctrine, is that it is evolutionary. New thoughts and concepts follow each other so fast that the equipment as envisioned in 1970 will be hopelessly behind the brainstorms of 1980. Combat developers, materiel developers and, yes, Test Directors come and go. That piece of gear, however, contracted for years ago, is, without terrific expenditures of funds, nearly immutable. I would suggest a much stronger link between combat and materiel developers

beginning at "day one" of a project with continuous mutual assessment of a program throughout its lifespan.

I would like to amend CPT Spear's suggestion as to an assignment with the Intelligence and Security Board by suggesting that the best and the brightest, those with the greatest field experience in EW/I, should demand a job with the materiel developer of the new systems. We will have to spend the rest of our careers living with this equipment and to have the opportunity to live through "conception and delivery," to influence its every nuance, is a challenge no one should miss. You only have to remember that the Board looks at the equipment after it is built.

William K. Moore CPT, MI

Editor,

More humor—The MI Prayer was fantastic. It was a featured presentation at the MI Ball here at Fort Hood this spring, quite the highpoint of the evening...

1LT, MI Fort Hood, TX (Readership Survey)

Law and Politics In China's Foreign Trade, Edited by Victor H. Li, University of Washington Press, 1977, pp xviii, 467.

Victor Li, professor of international legal studies at Stanford University, edited this book of scholarly essays on the foreign trade of the People's Republic of China. It is divided into two parts and includes 20 appendices. Each chapter was written by a specialist and contains footnote references.

Part I, Patterns and Legal Aspects of Trade Between China and Other Countries, covers commercial relations between the People's Republic of China and Japan, the Soviet Union, West Germany, Denmark, Italy, Hong Kong, and the United States.

The chapter, "Trade with the Soviet Union," is an interesting account of the problems and

conflicts of trade relations between the two socialist giants: the USSR and China (pp 70-120).

The chapter, "Trade with Hong Kong," indicates that the British Crown Colony of Hong Kong provides valuable services to facilitate China's economic dealings with other countries and that China's investments in Hong Kong extend far beyond a few banks and department stores within the private enterprise environment (pp 189-219).

Part II, Methods and Control of Trade, covers the technical aspects of China's foreign trade, such as maritime law and practice, means of payment in foreign trade, the foreign trade apparatus, and state control of foreign trade.

The chapter, "The Old Canton System of Foreign Trade," is a concise summary of early foreign trade in China (1680-1880) (pp 360-378).

The appendices contain documents relevant to China's foreign trade (e.g., Italian-Chinese Commercial Agreement, Standard Purchase Contract, Sino-Japanese Friendly Firm Trade Agreement, Bill of Lading, Insurance Policy on Cargo, among other documents).

This book should be read by China specialists, military and laymen alike, who are interested in China's economic development and foreign trade.

Richard A. Banyai, Editor, DTD, USAICS

New Career Progression
Charts are now available for
Career Management Fields 96
and 98 (which includes 05 and
33 series MOSs). These charts
have been designed to outline
the progression for enlisted personnel from Trainee to Sergeant
Major. These are available to
both official and subscription
fund subscribers from MI Magazine, P.O. Box 569, Fort Huachuca, AZ 85613.

by Philippa Strum, Goodyear Publishing Company, Inc., Santa Monica, CA, 1979, 184 pages.

Philippa Strum studies the American penchant for cultivating myths about its leaders. "Watergate," she writes, "threw doubt on the previously unchallenged post-New Deal assumption that increasing presidential power is a good thing..." At the same time, while the "imperial" presidency fell in the eyes of the American people, Congress rose in stature. Strum asserts that Americans essentially "exchanged one myth for another."

Strum's prose style is remarkably clear and free of bias. The author has a keen insight into the workings of the Congress and characterizes the members of congressional committees as "egoists" whose slogan is "one for one and everyone else look out."

Presidential Power and American Democracy conveys a thorough understanding of the checks and balances system, the manipulation of the press (especially during the Kennedy-Johnson era), the trend toward isolationism in the Presidency, and the relationship of the military-industrial complex to the executive branch. While the text is designed as a supplemental source for courses in political science and though examples are contemporary, the era covered (1960-1978) somehow demands more space than allowed here, and the attention of the military readers.

LT William Rieger Co G, USAICS

Anchors in the Sky, by RADM George van Deurs, Presidio Press, San Rafael, CA, 1978, \$12.95.

Anchors in the Sky is a biography of "Spuds" Ellyson, the first naval aviator. Theodore Gordon Ellyson was born in 1885 in Richmond, Virginia. After graduation from the Naval Academy, Spuds (nicknamed for his love of potatoes) began his

Naval career in a variety of typical naval assignments but wound up working with submarines. His role in the development of escape from a submerged submarine is discussed as is his first command, the submarine Shark and later the Tarantula.

From submarine duty he moved into flight training and was instructed by Glenn Curtis. While learning to fly in California, he was heralded as "the Navy flier" in the press. Curtis' flying school later moved to Hammondsport in 1911.

Anchors in the Sky discusses the testing and evaluation of aircraft for the Navy and the development of Naval Aviation. The adventures and misadventures of "the Navy flier" and the other pioneers make interesting reading and explain some of the conflicts that still occur in aviation.

The remainder of the book covers Spud's life in and out of Naval Aviation, submarines, World War I and Mexico. In 1916, Spuds became the first executive officer of the USS Lexington, the second aircraft carrier in the Navy. He was a Commander and had hopes of becoming Captain of her when he was promoted.

In 1928, his daughter became ill and he flew from Hampton Roads Air Station to Annapolis to be with her. He never made it as his plane crashed in Chesapeake Bay. Because of his reputation, his death did not go unnoticed and the investigation report eventually led to the establishment of the first system of formal flight clearances. Thus a living legend and pioneer of aviation passed into history.

The book was easy to read and most enjoyable. What most impressed me was a passage in the preface: "But the story of his career emphasizes a characteristic that raised Spuds above the average: He stuck his neck out." It occurred to me this is also a characteristic of many intelligence officers as they stick their necks out each time they prepare an intelligence estimate, etc.

Anyone interested in aviation, the pioneer spirit, the Navy and a success story in the "American Way" should read this book. For those Army Intelligence Officers who may expect to work on a

Naval Installation or as a liaison officer at Fleet Headquarters, this is a must-read book.

William L. Howard MAJ, Armor, USAR

Quantitative Approaches to Political Intelligence: The CIA Experience, Edited by Richard J. Heuer, Jr., Westview Press, 1978, 181 pages, \$16.50.

Edited by Mr. Heuer, a key official in the CIA's Office of Regional and Political Analysis. this work considers the CIA's concerted attempt to apply contemporary social science methodologies in the quantitative analysis of current international affairs issues. As such, the collection of analytical contributions by eight political intelligence specialists (either present or past CIA employees) lends considerable proof that these methods have been effectively integrated into the official assessment of current intelligence activities throughout the US intelligence community.

Several of the contributors address international affairs topics which bear pronounced military connotations, e.g. conflict probability among regional rivals, insurgency/terrorism potentials in Third World states and high-level political and military decision-making profiles. Consequently, this volume also should prove of value for possible application to more purely military intelligence analytical areas, particularly in the strategic intelligence field.

In his overview, Mr. Heuer asserts that the development and integration of these quantitative methods at CIA has helped compensate for manpower losses (particularly among its veteran analysts) during recent reorganizations and reductions. In military terms, his comments suggest that effective quantitative methods, as adapted for ADP systems, might be explored further as a "force multiplier" to provide timely, accurate intelligence products at the national and theater staff levels

The other seven contributions also deserve thoughtful consideration and several rate special mention for their specific rele-

[professional reader]

vance to military intelligence areas of interest. In his contribution, CIA analyst Nicholas Schweitzer applies modern versions of classical Bayesian Analysis to derive accurate probability estimates of the potential for the outbreak of conflict in the Middle East. Other chapters relate to the assessment of internal conflict and terrorism, (Frank Moritz' chapter on cross-impact analysis of the current situation in Rhodesia and Harold Dahlgren's violence profile model based on recent events in Argentina, Ethiopia and Thailand). A contribution by Edward Mickolus provides particularly incisive glimpses at the CIA's computerized data base on transnational terrorism and its increasing value as a research tool for high-level US decisionmakers in terrorist-related crisis management situations. Finally, editor Heuer contributes a solid piece on content and analysis methods recently used to measure internal support for Premier Brezhnev among key elements of the current Soviet regime.

While these studies include some rather detailed coverage of the various analytical methods employed, this work is highly readable. Charts, graphs and statistical tables amply support the individual contributions' thrusts and findings. Unlike a number of more abstract and theoretical works dealing with quantitative analysis applications in the international affairs/intelligence areas, this book demonstrates that quantitative analysis can be successfully applied to assess "real life" situations. It is, therefore, well recommended as excellent background reading for MI personnel, especially those who anticipate analytical assignments at the higher levels of the US intelligence community.

Joseph E. Thach, Jr. Ph.D. Major MI/USAR

Russia's Road to the Cold War: Diplomacy, Warfare and the Politics of Communism, 1941-1945, by Voitech Mastny, Columbia University Press, 1979, 409 pages, \$16.95.

Although Cold War terms like "political warfare" and "grand strategy" seems to have fallen into disrepute in recent years, they are quite applicable to Professor Mastny's excellent assessment of Soviet politico-military policies and aims during the Second World War. This work makes it very apparent that the traditional Marxist-Leninist strategic concept of the "correlation of forces," when taken in its broadest context, underwent one of its most severe tests at the hands of the Stalinist regime in the wartime years.

Well-supported by a myriad array of contemporary source materials (including Soviet writings and wartime media coverage), this eight-chapter analysis provides a clear trace of Soviet politico-military strategy from the massive Nazi invasion of the USSR on June 22, 1941 to Stalin's final meeting with his Anglo-American partners at the July 1945 Potsdam Conference. Throughout the work, Mastny makes it quite evident that in victory or defeat, Stalin and his key subordinates remained acutely sensitive to the impact of combat operations on respective Allied and Axis political fortunes through the war years. He contends that when the Red Army seized the strategic initiative on the Eastern Front with its stunning defeat of German panzer forces during the July 1943 Battle of Kursk, the Soviet leadership successfully translated this stunning combat victory into long-term political gains at the expense of enemies and allies alike. Mastny's findings on the post-Kursk hardening of Soviet attitudes toward the nations of Eastern Europe, further reveal that the Red Army's uninterrupted drive for Berlin over the next two years allowed the USSR to gain full control with Communist-led "baggage train" governments or to exert considerable political pressures upon these nations.

Professor Mastny's analysis of Soviet relations with its US and British allies after mid-1943 reveals a very similar pattern. Aiways regarded by Western leaders as somewhat difficult and mysterious, the Stalinist leadership's impatience and intransigence increased proportionally to its own favorable strategic situation in the aftermath of the victory at Kursk. His assessment of the major wartime conferences at Tehran and Yalta, as well as those lesser but vital ministerial meetings that occurred throughout the war years, are especially well done in their detailed treatment of Soviet political motives and its diplomatic maneuvers at the expense of the United States and Great Britain. There are occasions while reading this book when one is forced to stop and ponder whether Stalin waged war more vigorously against the Western Allies than the Germans, especially in the latter stages of the war in Europe.

This work offers a thorough and straightforward analysis of the trends and events which comprised Soviet strategic policies during the "Great Patriotic War." The author maintains a close grip on the Soviet ability to successfully translate both battlefield victories against the Germans and diplomatic maneuvers vis á vis its Western Allies into long-range political gains. At the same time, however, Mastny notes that grave errors can be made in the harsh realm of international power politics. His treatment of the apparent Soviet diplomatic successes is not intended to make them "ten feet tall" then or now. Mastny carefully points out that there were Soviet failures, fears and miscalculations which stemmed from the same basic sense of national insecurity that has characterized the Soviet rule since 1917.

If it has become fashionable among the recent "revisionist" school of historians to place almost unilateral blame on the United States for the postwar Soviet-American impasse which became the Cold War by 1948, Professor Mastny's outstanding effort serves as a valuable antidote to such imprecise and narrow historical perspectives. A highly readable work, its topical coverage is highly recommended as an excellent prelude to latterday trends in US-Soviet

relations.

Joseph E. Thach Jr., Ph.D. MAJ, MI, USAR

What is your comment on this issue of Military Intelligence?



"PROMOTING PROFESSIONALISM IN MILITARY INTELLIGENCE"

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"PROMOTING PROFESSIONALISM IN MILITARY INTELLIGENCE"

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MI MAGAZINE Box 569 Ft Huachuca, AZ 85613 The Duel of Giants—China and Russia in Asia, by Drew Middleton, Charles Scribner's Sons, New York, 1978, \$10.95

In 1976, Drew Middleton, military correspondent for the New York Times, spent three weeks in China on an official military tour visiting a variety of military, industrial and agricultural sites. Presumedly through an interpreter, Middleton interviewed persons from all walks of life to create a picture of contemporary Chinese society and its relationship with the "polar bear" to the north. Middleton expanded the impressions of his trip to include a military analysis of both China and the Soviet Union and a political analysis of future intentions.

Following the death of Mao, China has sought to maintain national security, attain superpower status, achieve political leadership in eastern and southeastern Asia, rectify Chinese borders and assume ideological leadership of Marxism-Leninism throughout the world. China's superpower status is a myth because China still a developing economy playing "catch-up" with the West while financing an excessive population, an expanding industrial capacity and a credible national defense.

Maoist doctrine stresses "selfreliance" in military and economic sectors, but to narrow the gap with the Soviet Union and the West, post-Mao China has compromised doctrine to import expensive foreign technology for energy exploitation, putting competing priorities on the limited capital available for military and industrial investment. Middleton does not foresee (as of 1978) immediate normalization of relations between the US and China, but perceives a Chinese recognition of the "strategic triangle of US-Soviet Union-Chinese relations" and the necessity of a stronger US policy and presence in the West Pacific to counter the Soviet Union. The power of the Soviets also forces China to maintain a passive role in reuniting Indochina.

Facing China is Siberia, the Soviet Union's "most valuable and vulnerable real estate," whose mineral potential provides energy resources and finances costly purchases of Western technology. Soviet military strength in Siberia has mushroomed since 1972, thus increasing, in Middleton's opinion, the possibility of a successful limited preemptive Soviet attack on Manchuria, the political and economic "jugular" of China.

Middleton regards China as an "unarmed giant," using outdated tactics and weaponry. China also bases strategy decisions on hopes the Soviets will "do exactly what the Chinese want them to do in war," adopting strategies that are in accordance with Chinese provisions. Chinese reliance on a "human sea" or a People's War supported by local militia and guerrillas is a fallacy Middleton argues would best be dropped in favor of modernization of the regular armed forces.

Middleton dismisses a Sino-Soviet rapprochement because of blatant Soviet imperialism, conflicting ideologies and the potential threat of a modernized China. The Sino-Soviet rivalry is deeply rooted in centuries of distrust and hostility dating back to the Romanov and Manchu dynasties. Due to the improvement of Soviet land and air forces in Siberia, the expansion of the Soviet Pacific fleet and the economic development of Siberia, Middleton argues that a border incident will escalate into a full Soviet attack on Manchuria and that China's only hope to avert such a war is rapid modernization.

Middleton is a persuasive, articulate author with an admiration for "an enduring, endearing people." This is a valuable book for its background on the Sino-Soviet conflict. Middleton's arguments supporting the US's unwillingness to normalize relations with China and China's reluctance to confront a "militant and ambitious" Vietnam have both been proven inaccurate, but since both actions were stunningly unanticipated, Middleton should not be totally invalidated in his assessment of Asian politics.

The Duel of the Giants is an exceedingly readable book, but Middleton's inability or reluctance to document his arguments weakened the book for readers seeking an in-depth study.

This book has neither footnotes nor bibliography. Perhaps
Middleton did this to enhance
the readability of a "popular," nonacademic text, but it would not
seem disasterous citing sources
of his information. Instead,
Middleton relies on partial identification of sources (name of
author) or a profusion of phases
such as a "Russian report" (p.
50), "one American estimate" (p.
146), "evidence [proves]" (not
specified!!, p. 161), or "NATO
intelligence consensus" (p. 173).

To evaluate Middleton's thesis intelligently, sources must be identified to allow the reader to examine the facts and draw his own conclusions. Middleton's arguments are thought-provoking and analytical, but without identified sources, the book fell far short of its intentions. If he planned only to tell us how he spent his summer vacation, he might have been wiser to leave it at that.

CPT Dianne Smith Department of History United States Military Academy

Marcos and Martial Law in the Philippines, by David Rosenberg, Cornell University Press, Ithaca, NY, 1978, 570 pp, \$17.50

The imposition of martial law is an emotional and value-laden step for any government to take; thus any analysis can be expected to reflect a conflict of values. This volume of five case studies examines martial law in the Philippines since 1972 is no exception, even though the cover proclaims the study to be "the first balanced assessment of the Marcos regime." Upon examination, however, balance, if defined as the presentation of opposing points of view in an evenhanded manner, is missing. This book might more appropriately claim to be a serious analytical criticism of the Marcos regime. The dominant attitude is highly critical in addressing, in turn, the failure of the government under martial law to distribute wealth and power; the neutralization and resultant subservience of the legal system to where it is now bending with the wind "like the

proverbial Oriental bamboo...in an effort to survive" (p. 112); the half-hearted attempt at land reform; the suppression of the media; and the process of subordinating the economy to the interests of foreign capital.

A central theme of the book is the dilemma of the third world politician searching for the balance of democratic freedoms and authoritarian controls that best supports the development

The documentation adequately support each author's analysis, but presents the Marcos government's point of view only from press releases, official documents or speeches by Marcos. Missing is commentary from a variety of sources providing analysis favorable to or reinforcing the government policy.

The book flows smoothly and avoids the drudgery often found in case studies, yet a careful reading is required to fully grasp the analysis. Its strength is the broad view of the nation-building process contained therein. Marcos is criticized for his establishment of authoritarian control with the resulting losses in democratic processes, privileges and institutions that existed prior to martial law and thus the disruption of the nation building process, but not for using personal aggrandizement as his motivating force.

The major weakness is the omission of any detailed discussion of the real significance of the affect of martial law on the majority of the Philippine population. Clearly, there has been a loss in power and status for the old elites accompanied by the emergence of a new elite group, but did the peasant in premartial law days enjoy more economic benefits or actually have an impact on the political processes? The question is not clearly addressed.

The one-sided view notwithstanding, this book is primarily useful to two categories of reader: those with an interest in Asia in general, and the Philippines in particular; and those concerned with developmental studies. The direct applicability to the military reader is rather limited. For those with the interests, the pre- and post-martial law analysis provides an excellent starting point for studying the Philippines today. The concluding chapter by Professor Stauffer provides a useful framework for additional studies on the Philippines or for comparative analysis with the experience of other developing nations.

John F. Corbett, Jr. CPT, MI

Decent Interval, by Frank Snepp, Vintage Books, New York, 1977, 590 pages, \$4.95 (paperback).

I waited a "decent interval" before reading this well-publicized and controversial account of the fall of South Vietnam and found it to be less controversial than one might imagine in light of Snepp's court battle with the CIA.

Snepp adequately covers mistakes leading to the loss of South Vietnam from his experiences as a CIA senior intelligence analyst.

The book offers many examples of the heroism of US civilian and military personnel who served in Vietnam up to and through the evacuation. Many Americans are seen in their finest hours as they attempt to rescue Vietnamese friends and supporters.

Snepp treats the people in this book fairly, with criticism and with praise. The book's special value to military personnel is in its description of the spread of panic through the South Vietnamese Army in Military Region 2 which ultimately led to the loss of the entire country.

MAJ John M. Rooney Resource Analyst, USAICS

Treachery on the Double by H. Eugene Barfield, Exposition Press, Hicksville, NY, 1979, 150 pages, \$7.

Setting the story in Thailand during the Vietnam era, Barfield presents a background of treachery in an international drug "war."

The author uses a USeducated Albanian patriot from World War II, who joins the communists as a result of our involvement in Korea and becomes an agent for the Chinese in the drug war in Southeast Asia. His American counterpart, an Air Force sergeant with CIA connections, does little to improve the story or promote confidence in the writer.

The author often leaves the reader hanging and seldom picks up the pieces of his plot line. Barfield's knowledge of Air Force operations does little to encourage the reader; his long explanations of military operations tend to be tedious.

Treachery on the Double is a novel one can avoid without regrets.

L. C. Harms USAICS

Brezhnev-Summit for an Ailing Leader, New York Times Magazine, June 10, 1979.

Here is a view of Brezhnev, his stands and his capabilities. Whitney looks at eight possible successors to Brezhnev's position. He also investigates how US-USSR relations will be affected when Brezhnev is replaced. This is a very interesting article and one that may well acquaint us with the next leader of the Soviet Union.

Take Nine Spies, Sir Fitzroy Maclean, Atheneum, NY, 1978.

Take Nine Spies is a collection of nine true spy stories. Sir Fitzroy reveals the secrets of spies from COL Oleg Penkowski to Mata Harri, presenting a good biographical study of spies and the historical and political aspects of their profession. Intelligence, Espionage, Counterespionage, and Covert Operations, (Vol 2 of International Relations), Paul Blackstock and Frank Schaf, Gale Research Co., Detroit, MI, 1978.

Blackstock and Schaf have compiled an excellent annotated bibliography for the MI professional. It includes references to books, magazines, and journals covering the four areas in the title. It deals mainly with US, USSR, NATO, and the East. However, should you desire to find material on intelligence during Napoleon's era or covert operations conducted by the CIA this is the place to start.

INTELLIGENCE TRAINING LITERATURE



TC-1-88 (Mar 77), the Aviator's Recognition Guide, is under revision and should hit the field in a few months with an Apr 79 date. Some copies of the '77 book can be scrounged from the folks at the US Army Aviation Center, ATZQ-TD-TL-GP, Fort Rucker, AL 36362—give them a call at AUTOVON 558-2482 before you quisition, as the supply is her low.

This little jewel (for those amiliar with it) is unclassified, sout the right size to fit in a field jacket pocket, and worth its weight in gold to aviators and nonflying personnel alike. Concise descriptions accompany photographs and silhouettes of major weapons systems of interest to us all: aircraft, anti-aircraft artillery, surface-to-air missiles, armor, field artillery and light armored vehicles of the MICV variety.

An added bonus is the inclusion of points of greatest vulnerability on certain systems; also, instructions for fabricating a recognition training aid, complete with simple schematic, come in the back of the manual. This is one for the troops in the field, from the recon/surveillance people to the unit training NCO.

TSgt H.W. Isleib, USAF Air Force Intelligence Service

In Intelligence Training Literature (April-June 1979), Intelligence Electronic Warfare (IEW) was referenced in conjunction with FM 34-1 and FM 34-2. IEW is now EWI or Electronic Warfare Intelligence. FM 34-1 and FM 34-2 will reflect this change when published.

The April-June 1979 issue of MI Magazine listed a number of field manuals and training circulars scheduled for publication during the next two years. The article should have stressed that these documents are scheduled

for publication and are not yet available. Dates indicating the expected time of publication follow the descriptions of each manual

The 34-series identifier now in use incorporates both the old 30 and 32 series literature. The Literature Doctrine Office at Fort Huachuca and the Training Literature Division at Fort Devens now are working to revise all doctrinal literature published under the old numbers. The new series will integrate tactical intelligence and SIGINT/EW doctrine in nearly every manual published. The revision program is a team effort of both Fort Huachuca and Fort Devens. Both offices are moving at full speed to put new doctrinal literature on the streets

Points of contact for doctrinal literature are CPT Ralph Morgridge at Fort Devens (AUTO-VON 256-3406) and Mr. Phil Young at Fort Huachuca (AUTO-VON 879-2085/5570).

